

Noon Fri Jan. 23

Access DB# 112518

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Ghasseni, Alie Examiner #: 79827 Date: 1/21/03
Art Unit: 3724 Phone Number 30 54981 Serial Number: 09955690
Mail Box and Bldg/Room Location: CP2 11806 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Attachment for hair clippers

Inventors (please provide full names): James McCambridge and
Scott Helton

Earliest Priority Filing Date: 09/19/2001

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

The invention is a trimmer attachment for the hair clipper.

The trimmer attachment reciprocates in response to
Blade
the hair clipper's reciprocating blade. The trimmer
attachment is removably secured to the hair
clipper head.

*Please see Figs. 1 and 2 and Claims in the
attachment.

Focus Claim-1

| STAFF USE ONLY | | Type of Search | Vendors and cost where applicable |
|---|------------------------|--|-----------------------------------|
| Searcher: <u>Emory Damprow</u> | NA Sequence (#) _____ | STN _____ | |
| Searcher Phone #: <u>305 8587</u> | AA Sequence (#) _____ | Dialog <u>✓ 927.97</u> | |
| Searcher Location: <u>CP2 2 C8</u> | Structure (#) _____ | Questel/Orbit _____ | |
| Date Searcher Picked Up: <u>1/23/04 EAM</u> | Bibliographic <u>✓</u> | Dr. Link _____ | |
| Date Completed: <u>1/23/04 2:30 PM</u> | Litigation _____ | Lexis/Nexis _____ | |
| Searcher Prep & Review Time: <u>180 min</u> | Fulltext <u>✓</u> | Sequence Systems _____ | |
| Clerical Prep Time: <u>180 min</u> | Patent Family _____ | WWW/Internet <u>Selected Razor Sales</u> | |
| Online Time: _____ | Other _____ | Other (specify) _____ | |



STIC Search Report

EIC 3700

STIC Database Tracking Number: 112518

TO: Ghassem Alie
Location: cp2 11b06
Art Unit: 3724
Friday, January 23, 2004

Case Serial Number: 09/955690

From: Emory Damron
Location: EIC 3700
CP2-2C08
Phone: 305-8587

Emory.Damron@uspto.gov

Search Notes

Dear Ghassem,

Please find below an inventor search in the bibliographic and full-text foreign patent files, as well as keyword searches in the patent and non-patent literature files, both bibliographic and full text.

References of potential pertinence have been tagged, but please review all the packets in case you like something I didn't.

In addition to searching on Dialog, I also searched Google.com, and EPO/JPO/Derwent.

Allow me to direct your attention to the patent literature packet, full text, EP630596/US 5611804, to Heintke et. al.; the claims are of particular interest.

Please contact me if I can refocus or expand any aspect of this case.

Sincerely,

Emory Damron

Technical Information Specialist

EIC 3700, US Patent & Trademark Office

Phone: (703) 305-8587/ Fax: (703) 306-5915

Emory.damron@uspto.gov





STIC Search Results Feedback Form

EIC 3700

Questions about the scope or the results of the search? Contact **the EIC searcher or contact:**

John Sims, EIC 3700 Team Leader
308-4836, CP2-2C08

Voluntary Results Feedback Form

➤ I am an examiner in Workgroup: 3724 Example: 3730

➤ Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
(journal articles, conference proceedings, new product announcements etc.)

➤ Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC/EIC3700 CP2 2C08



| Set | Items | Description |
|-----|---------|---|
| S1 | 185538 | CUTTER? ? OR CLIPPER? ? OR SHAVER? ? OR RAZOR? ? OR (CLIP? - ??? OR CUTT??? OR SHAV??? OR TRIMM???) (3N) (TOOL? OR INSTRUMEN- T? OR IMPLEMENT?) |
| S2 | 183538 | HAIR OR BEARD OR MUSTACH? OR SIDEBURN? OR SIDE()BURN? OR E- AR OR EARS OR NOSE? ? OR NECK? ? |
| S3 | 1959743 | ELECTRIC? |
| S4 | 31330 | TRIMM??? OR TRIMMER? ? OR BEARDTRIM? OR MUSTACHETRIM? OR S- IDEBURNTRIM? OR SIDEBURNSTRIM? OR HAIRTRIM? |
| S5 | 263319 | ATTACHMENT? ? OR ACCESSORY? OR ACCESSORIE? |
| S6 | 952849 | AUXILIAR? OR SUPPLEMENTA? OR ADAPTER? ? OR ADDON? OR ADD()- (ON OR ONS) OR ADDITION?? |
| S7 | 141350 | IMPROVER? ? OR IMPROVEMENT? ? OR APPURTENAN? |
| S8 | 26365 | REMOVABL?(2N) (ATTACH????? OR SECUR??? OR AFFIX????? OR FAS- TEN??? OR APPEND??? OR CONNECT??? OR ADJOIN????) OR DETACHBL? |
| S9 | 130186 | STATIONARY? OR (NON OR "NOT" OR UN) () (MOVING OR MOTILE OR - MOBILE) OR NONMOVING OR UNMOVING OR NOTMOVING OR NONMOTILE OR UNMOTILE OR NOTMOTILE OR UNMOBILE OR NONMOBILE OR NOTMOBILE |
| S10 | 1545317 | IMMOBILE OR IMMOTILE OR FIXED OR RIGID OR STEADY |
| S11 | 904622 | RECIPROCATING OR MOVING OR MOTILE OR MOBILE OR IN()MOTION - OR BACK????? (2W) (FORTH OR FORWARD?) |
| S12 | 8783 | "TO" (2W) FRO |
| S13 | 4872 | IC=B25F? |
| S14 | 1298 | S1 AND S2 AND S3 |
| S15 | 20 | S14 AND S4 AND S5:S7 |
| S16 | 12 | S15 AND S8:S13 |
| S17 | 20 | S15:S16 |
| S18 | 20 | IDPAT (sorted in duplicate/non-duplicate order) |

? show files

File 347:JAPIO Oct 1976-2003/Sep(Updated 040105)

(c) 2004 JPO & JAPIO

File 350:Derwent WPIX 1963-2004/UD,UM &UP=200405

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18/3,K/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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014321041 **Image available**
WPI Acc No: 2002-141743/200219
XRPX Acc No: N02-107197

Electric hair cutting, styling device has drive mechanism to transmit
reciprocating movement from motor to hair cutting device in head
portion, through connectors

Patent Assignee: MATSUSHITA ELECTRIC WORKS LTD (MATW)

Inventor: UENISHI Y; YAMAGISHI Y

Number of Countries: 027 Number of Patents: 002

Patent Family:

| Patent No | Kind | Date | Applicat No | Kind | Date | Week |
|---------------|------|----------|---------------|------|----------|----------|
| EP 1174227 | A2 | 20020123 | EP 2001115765 | A | 20010710 | 200219 B |
| JP 2002028383 | A | 20020129 | JP 2000217960 | A | 20000718 | 200224 |

Priority Applications (No Type Date): JP 2000217960 A 20000718

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 1174227 A2 E 15 B26B-019/04

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT
LI LT LU LV MC MK NL PT RO SE SI TR

JP 2002028383 A 8 B26B-019/48

Electric hair cutting, styling device has drive mechanism to transmit
reciprocating movement from motor to hair cutting device in head
portion, through connectors

Abstract (Basic):

... The main portion (1) has a drive mechanism to transmit
reciprocating movement from a motor to hair shaver / trimmer , in
corresponding head portion which is detachably connected to main
portions, through connectors.

... Electric hair cutting/styling devices...

...The drive mechanism enables selective attachment of one of various
cutters , corresponding to needs of user. The cutter having excellent
sharpness is easily stored or carried without vibration or noise...

...The figure shows a sectional view of a shaver head

Title Terms: ELECTRIC ;



(11) **EP 1 174 227 A2**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
23.01.2002 Bulletin 2002/04

(51) Int Cl.7: **B26B 19/04**

(21) Application number: 01115765.8

(22) Date of filing: 10.07.2001

(84) Designated Contracting States:
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE TR**
Designated Extension States:
AL LT LV MK RO SI

(30) Priority: 18.07.2000 JP 2000217960

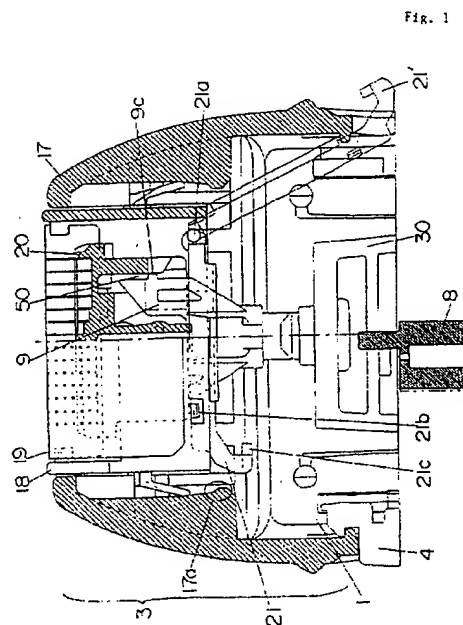
(71) Applicant: **Matsushita Electric Works, Ltd.**
Osaka 571-8666 (JP)

(72) Inventors:
• **Yamagishi, Yuuji**
c/o Matsushita Electric Works, Ltd
Osaka 571-8686 (JP)
• **Uenishi, Yasuo**
c/o Shiga Kobayashi Seiko Co., Ltd.
Shiga 520-2313 (JP)

(74) Representative: **Schwabe - Sandmair - Marx**
Stuntzstrasse 16
81677 München (DE)

(54) **Electric hair cutter or styling apparatus**

(57) A rotating/reciprocating movement converting part is provided in a main body (1) and a connecting arrangement rod (9) is projected from the upper surface of the main body (1). When a shaver head (3) is mounted on the main body, the connecting arrangement is fitted to a connecting part (50) in the side of an inner cutting blade to transmit a reciprocating movement to an inner cutting blade (20). When a trimmer head is mounted on the main body, the recessed inside part of the driving rod 9 is fitted to a connecting part in the side of a movable cutting blade to transmit a reciprocating movement to a movable cutting blade. Thus, according to the present invention, problems such as an enlarged head and the deterioration of sharpness of a conventional electric hair cutter having a rotating/reciprocating movement converting part provided in the head can be overcome.



EP 1 174 227 A2

18/3,K/3 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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012355466 **Image available**
WPI Acc No: 1999-161573/199914
XRPX Acc No: N99-118102

Hair cutting mechanism for electrically driven hair clipper - has
auxiliary comb arranged behind mobile cutting blade main body, which
is inturn fixed to cutting blade main body

Patent Assignee: SASAKI K (SASA-I)

Number of Countries: 001 Number of Patents: 001

Patent Family:

| Patent No | Kind | Date | Applicat No | Kind | Date | Week |
|-------------|------|----------|-------------|------|----------|----------|
| JP 11019345 | A | 19990126 | JP 97215418 | A | 19970704 | 199914 B |

Priority Applications (No Type Date): JP 97215418 A 19970704

Patent Details:

| Patent No | Kind | Lan Pg | Main IPC | Filing Notes |
|-------------|------|--------|-------------|--------------|
| JP 11019345 | A | 4 | B26B-019/28 | |

Hair cutting mechanism for electrically driven hair clipper - ...
...has auxiliary comb arranged behind mobile cutting blade main body,
which is inturn fixed to cutting blade main body

...Abstract (Basic): 3,4) have different shaped tooth (8,9) and varying
sized holes (14,16) are fixed together by a screw (2) and then
sequentially fastened to the main body of a cutting blade (5), a
mobile cutting blade (6) and an auxiliary comb (7). The two cutting
blades and auxiliary comb comprises a main cutting blade (11), a
mobile cutting blade (12) and tooth (13), respectively. The whole
assembly is finally fixed to main body (1) of electric hair
trimmer .

...

...USE - For electrically driven hair clipper .

...

...ADVANTAGE - Eases sliding over hair for trimming required length of
hair completely without chances of errors, such as too much shortening
of hair . Enables proper hair trimming by unexperienced or old
person. DESCRIPTION OF DRAWING(S) - The figure shows cross-sectional
view of hair trimmer . (1) Main body of electric hair trimmer ;
(2) Screw; (3,4) Combs; (5) Cutting blade; (6,12) Mobile cutting
blades; (7) Auxiliary comb; (8,9,13) Teeth; (11) Main cutting blade;
(14,16) Holes

Title Terms: HAIR ;

(19) 日本国特許庁 (J P)

(12) 公開特許公報 (A)

(11) 特許出願公開番号

特開平11-19345

(43) 公開日 平成11年(1999) 1月26日

(51) Int.Cl.⁶

B 2 6 B 19/28

識別記号

F I

B 2 6 B 19/28

A

審査請求 未請求 請求項の数 6 書面 (全 4 頁)

(21) 出願番号 特願平9-215418

(22) 出願日 平成9年(1997) 7月4日

(71) 出願人 593022777

佐々木 恵志

千葉県八街市泉台2丁目18番1号

(72) 発明者 佐々木 恵志

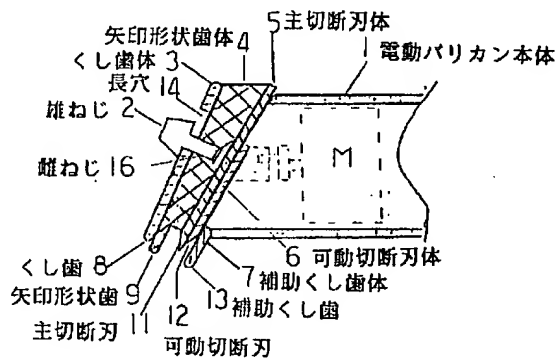
千葉県八街市泉台2丁目18番1号

(54) 【発明の名称】 電動バリカンの髪切断装置

(57) 【要約】

【課題】 長髪の髪切断を素人でも簡単に長さのそろった、外観の良い仕上がりに切断する、電動バリカンの髪切断装置。

【解決手段】 電動バリカン本体1の先端側に、雄ねじ2を、先端が複数のくし歯8のくし歯体3の長穴14を通し、先端を矢印形状とした複数の矢印形状歯9の矢印形状歯体4の雌ねじ16に締めつけ固定し、矢印形状歯体4を主切断刃11の主切断刃体5に接着固定し、可動切断刃12の後方に複数の補助くし歯13の補助くし歯体7をもうける。



18/3,K/4 (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.

011670805 **Image available**
WPI Acc No: 1998-087714/199809
XRPX Acc No: N98-069559

Long hair trimming device for electric razor attachment - has
springs acting on pressure beam to press reciprocating blade against
underside of stationary cutting comb

Patent Assignee: MOSER ELEKTROGERAETE GMBH (MOSE-N)

Inventor: LEBHERZ R; MUELLER H

Number of Countries: 001 Number of Patents: 001

Patent Family:

| Patent No | Kind | Date | Applicat No | Kind | Date | Week |
|-------------|------|----------|-------------|------|----------|----------|
| DE 19626736 | C1 | 19980205 | DE 1026736 | A | 19960703 | 199809 B |

Priority Applications (No Type Date): DE 1026736 A 19960703

Patent Details:

| Patent No | Kind | Lan Pg | Main IPC | Filing Notes |
|-------------|------|--------|-------------|--------------|
| DE 19626736 | C1 | 7 | B26B-019/10 | |

Long hair trimming device for electric razor attachment - ...

...has springs acting on pressure beam to press reciprocating blade
against underside of stationary cutting comb

...Abstract (Basic): The device has a **stationary** cutting comb (10) bent
at right angles relative to a rear fixing plate (12) and a cooperating
reciprocating blade (30), pressed against the underside of the
stationary cutting comb via springs (70...

...against a pressure beam (50), in turn acting on a carrier plate (40) for
the **reciprocating** blade. The pressure beam is secured to the spring
carrier via cooperating ratchet elements allowing...

...Title Terms: **HAIR** ;



⑬ BUNDESREPUBLIK
DEUTSCHLAND



DEUTSCHES
PATENTAMT

⑫ Pat ntschrift
⑩ DE 196 26 736 C 1

⑤ Int. Cl.⁸:
B 26 B 19/10

⑳ Aktenzeichen: 196 26 736.6-15
㉑ Anmeldetag: 3. 7. 96
㉒ Offenlegungstag: —
㉓ Veröffentlichungstag
der Patenterteilung: 5. 2. 98

DE 196 26 736 C 1

Innerhalb von 3 Monaten nach Veröffentlichung der Erteilung kann Einspruch erhoben werden

㉔ Patentinhaber:
Moser Elektrogeräte GmbH, 78089 Unterkirnach, DE

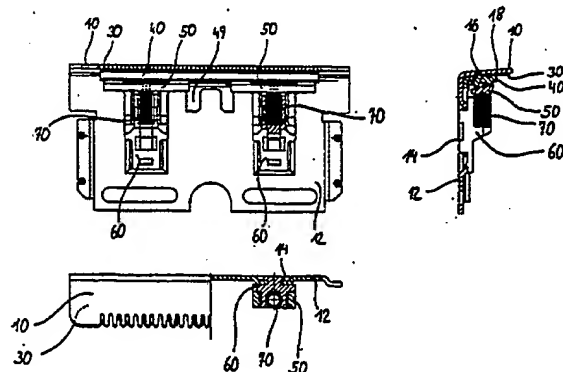
㉕ Vertreter:
Patentanwälte Westphal, Mussgnug & Partner,
78048 Villingen-Schwenningen

㉖ Erfinder:
Lebherz, Robert, 78056 Villingen-Schwenningen, DE;
Müller, Hartmut, 78606 Seitigen-Oberflacht, DE

㉗ Für die Beurteilung der Patentfähigkeit
in Betracht gezogene Druckschriften:
DE 39 25 008 C1
DE 28 36 959 A1

㉘ Langhaarschneideinrichtung für elektrische Rasierapparate

- ㉙ Langhaarschneideinrichtung für einen elektrischen Rasierapparat mit
- einem feststehenden Scherkamm (10), der rückseitig abgewinkelt in eine Befestigungsplatte (12) übergeht,
 - einem Untermesser (12), das nach Art einer Scherklinge plan ausgeführt, unter der Einwirkung von Federn (70) gegen den Scherkamm (10) gedrückt gehalten, sowie längs diesem geradlinig hin und her verschiebbar gelagert ist,
 - einer Trägerplatte (40), die an der Befestigungsplatte (12) befestigt ist und die Federn (70) aufnimmt, und
 - einer Trägerplatte (40), auf der das Untermesser (30) befestigt ist und die ein Kopplungselement (49) zum Eingriff eines Antriebszapfens besitzt, mit
 - wenigstens einem Andruckbalken (50), der axial verschieblich an dem Federträger (60) gelagert, von den Federn (70) beaufschlagt, sowie infolge der Wirkung der Federn (70) gegen die Trägerplatte (40) gedrückt gehalten ist.



DE 196 26 736 C 1

18/3,K/6 (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.

008697720 **Image available**
WPI Acc No: 1991-201740/199128
XRPX Acc No: N91-154300

Electric **battery-powered shave with auxiliary hair trimmer - can be deployed for use independently of main shave blades by finger pressure on slider**

Patent Assignee: MATSUSHITA ELECTRIC WORKS LTD (MATW)

Inventor: FUJIKAWA S; OGAWA H

Number of Countries: 003 Number of Patents: 005

Patent Family:

| Patent No | Kind | Date | Applicat No | Kind | Date | Week |
|-------------|------|----------|-------------|------|----------|----------|
| DE 4039681 | A | 19910704 | DE 4039681 | A | 19901212 | 199128 B |
| US 5054199 | A | 19911008 | US 90623065 | A | 19901206 | 199143 |
| JP 11309281 | A | 19991109 | JP 89335469 | A | 19891225 | 200004 |
| | | | JP 9984705 | A | 19891225 | |
| JP 3015366 | B2 | 20000306 | JP 89335469 | A | 19891225 | 200016 |
| | | | JP 9984705 | A | 19891225 | |
| JP 3017508 | B2 | 20000313 | JP 89335469 | A | 19891225 | 200017 |

Priority Applications (No Type Date): JP 89335469 A 19891225; JP 9984705 A 19891225

Patent Details:

| Patent No | Kind | Lan | Pg | Main IPC | Filing Notes |
|-------------|------|-----|----|-------------|-----------------------------------|
| DE 4039681 | A | | 14 | | |
| JP 11309281 | A | | 7 | B26B-019/10 | Div ex application JP 89335469 |
| JP 3015366 | B2 | | 7 | B26B-019/06 | Div ex application JP 89335469 |
| | | | | | Previous Publ. patent JP 11309281 |
| JP 3017508 | B2 | | 9 | B26B-019/10 | Previous Publ. patent JP 3193084 |
| US 5054199 | A | | 13 | | |

Electric **battery-powered shave with auxiliary hair trimmer -**

...Abstract (Basic): Normal shaving is performed with a **fixed** blade (51) and a relatively **moving** blade (52) urged together by a torsion spring (53) while the upper blade (52) is...

...The smaller blades (71,72) of the **trimmer** (70) are mounted above the shaving comb (60) and engaged with a driving element (40...

...ADVANTAGE - Fine **trimming** in limited region beyond normal haircut is accomplished with same appliance.(14pp Dwg.No. 1...

...Abstract (Equivalent): A motor-driven **hair cutter** is provided with a main **cutter** and a **trimmer** at a front end of an elongated housing. Each of the main **cutter** and the **trimmer** is a reciprocatory **cutter** comprising a toothed **stationary** blade and a toothed movable blade driven to reciprocate in **hair** shearing engagement with the **stationary** blade...

...The **trimmer** is movable between a retracted position in which a cutting edge of the **trimmer** is behind a cutting edge of the main **cutter** and a projected position in which the cutting edge of the **trimmer** projects forwardly of the main **cutter** so that the **trimmer** alone can be used. The **trimmer** blades are formed to be smaller in thickness as well as in cutting edge width than those of the main **cutter** blades in order to facilitate a delicate **trimming** of hairs in a restricted area of a user's head by the **trimmer**.

...

...USE - Combination electrically -powered hair cutter with a trimmer
in addition to a main cutter . (13pp)

Title Terms: ELECTRIC ;

Ogawa et al.

[11] Patent Number: 5,054,199

[45] **Date of Patent:** Oct. 8, 1991

[54] HAIR CUTTER

[75] Inventors: **Hitoshi Ogawa, Hikone; Shoji Fujikawa, Ishibe, both of Japan**

[73] Assignee: Matsushita Electric Works, Ltd.,
Japan

[21] Appl. No.: 623,065

[22] Filed: Dec. 6, 1990

[30] Foreign Application Priority Data

Dec. 25, 1989 [JP] Japan 1-335469

[51] Int. Cl.³ B26B 19/00; B26B 19/02;
B26B 19/12; B26B 19/10

[52] U.S. Cl. 30/34.1; 30/200;
30/210; 30/216

[58] **Field of Search** 30/34.1, 34.2, 43.1,
30/42, 43, 200, 210, 216, 123

[56] **References Cited**

U.S. PATENT DOCUMENTS

| | | | |
|-----------|---------|-----------------------|---------|
| 4,283,848 | 8/1981 | Messinger et al. | 30/34.1 |
| 4,393,585 | 7/1983 | Nagelkerke | 30/34.1 |
| 4,614,036 | 9/1982 | Haraguchi | 30/200 |
| 4,776,095 | 10/1988 | Tsujimoto et al. . | |
| 4,845,847 | 7/1989 | Ysunaka et al. | 30/34.1 |

FOREIGN PATENT DOCUMENTS

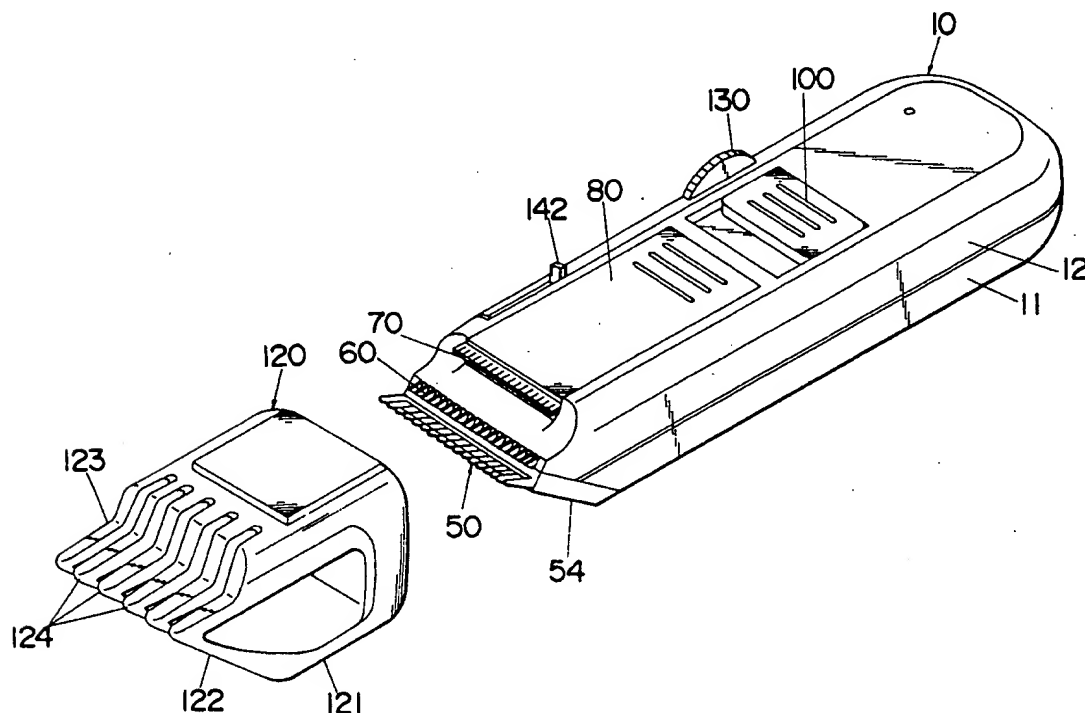
63-158093 7/1988 Japan .

Primary Examiner—Frank T. Yost
Assistant Examiner—Paul M. Heyrana, Sr
Attorney, Agent, or Firm—Stevens, Davis, Miller & Mosher

[57] ABSTRACT

A motor-driven hair cutter is provided with a main cutter and a trimmer at a front end of an elongated housing. Each of the main cutter and the trimmer is a reciprocatory cutter comprising a toothed stationary blade and a toothed movable blade driven to reciprocate in hair shearing engagement with the stationary blade. The trimmer is movable between a retracted position in which a cutting edge of the trimmer is behind a cutting edge of the main cutter and a projected position in which the cutting edge of the trimmer projects forwardly of the main cutter so that the trimmer alone can be used. The trimmer blades are formed to be smaller in thickness as well as in cutting edge width than those of the main cutter blades in order to facilitate a delicate trimming of hairs in a restricted area of a user's head by the trimmer.

5 Claims, 8 Drawing Sheets



18/3,K/9 (Item 9 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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004533546

WPI Acc No: 1986-036890/198606

XRPX Acc No: N86-026921

Hair trimming device for electric razor - has reciprocating
blade with attached plastics carrier providing mounting rail

Patent Assignee: BRAUN AG (BRAG)

Inventor: HILFINGER P

Number of Countries: 012 Number of Patents: 006

Patent Family:

| Patent No | Kind | Date | Applicat No | Kind | Date | Week |
|------------|------|----------|-------------|------|----------|----------|
| EP 170112 | A | 19860205 | EP 85108431 | A | 19850708 | 198606 B |
| DE 3428487 | A | 19860213 | DE 3428487 | A | 19840802 | 198608 |
| DE 3428487 | C | 19860821 | | | | 198634 |
| US 4628606 | A | 19861216 | US 85760201 | A | 19850729 | 198701 |
| EP 170112 | B | 19890517 | | | | 198920 |
| DE 3570200 | G | 19890622 | | | | 198926 |

Priority Applications (No Type Date): DE 3428487 A 19840802

Patent Details:

| Patent No | Kind | Lan | Pg | Main IPC | Filing Notes |
|-----------|------|-----|----|----------|--------------|
|-----------|------|-----|----|----------|--------------|

| | | | | | |
|-----------|---|---|----|--|--|
| EP 170112 | A | G | 15 | | |
|-----------|---|---|----|--|--|

Designated States (Regional): AT BE CH DE FR GB IT LI LU NL SE

| | | | | | |
|-----------|---|---|--|--|--|
| EP 170112 | B | G | | | |
|-----------|---|---|--|--|--|

Designated States (Regional): AT BE CH DE FR GB IT LI LU NL SE

Hair trimming device for electric razor - ...

...has reciprocating blade with attached plastics carrier providing
mounting rail

...Abstract (Basic): The **trimming** device employs a **fixed** **cutter** comb
and a cooperating **reciprocating** blade (3). The blade has a plastics
carrier directly attached to it to form a...

...the plastics material of the carrier. The carrier defines a support rail
used for secure **attachment** of the blade (3)...

...Abstract (Equivalent): The dry **shaver** has a **moving** blade (8) which
co-operates with a **fixed** blade (3). The **fixed** blade is mounted on a
plastics support (2) and abuts against a ridge (6) running...

...The **fixed** blade is secured to the support by means of a key (7)
projecting from the...

...Abstract (Equivalent): A long- **hair** **trimmer** for dry **shavers** , with a
fixed cutting comb (8) and a **cutter** (1) which is reciprocable along
said cutting comb in a straight line and is urged into engagement
therewith by means of compression springs (20), said **cutter** being
comprised of a cutting blade (3) of plane configuration and a support
member (2)...

...a plastic material which combines with the cutting blade (3) to form an
integral, flexurally **rigid** unit, characterised in that a) the cutting
blade (3) is provided with an oblong aperture...

Title Terms: **HAIR** ;

United States Patent [19]
Hilfinger

[11] **Patent Number:** 4,628,606
[45] **Date of Patent:** Dec. 16, 1986

[54] **TRIMMER FOR DRY SHAVER**

- [75] **Inventor:** Peter Hilfinger, Bad Homburg, Fed.
Rep. of Germany
- [73] **Assignee:** Braun Aktiengesellschaft, Kronberg,
Fed. Rep. of Germany

[21] **Appl. No.:** 760,201

[22] **Filed:** Jul. 29, 1985

[30] **Foreign Application Priority Data**

Aug. 2, 1984 [DE] Fed. Rep. of Germany 3428487

- [51] **Int. Cl.⁴** B26B 19/10
- [52] **U.S. Cl.** 30/34.1; 30/43.92
- [58] **Field of Search** 30/34.1, 43.92, 210,
30/329, 43, 45; D28/45

[56] **References Cited**

U.S. PATENT DOCUMENTS

- 3,855,697 12/1979 Meyer et al. 30/34.1
- 3,909,938 10/1975 Brenneman et al. 30/34.1
- 3,967,372 7/1976 Beck et al. 30/34.1
- 4,085,503 4/1978 Beck et al. 30/34.1
- 4,262,415 4/1981 Braun 30/34.1

FOREIGN PATENT DOCUMENTS

- 2058646 11/1970 Fed. Rep. of Germany .
- 2836959 3/1980 Fed. Rep. of Germany .
- 3031918 8/1980 Fed. Rep. of Germany .
- 56558 5/1978 Japan .
- 98853 8/1979 Japan .
- 480922 12/1969 Switzerland .

Primary Examiner—Harold D. Whitehead

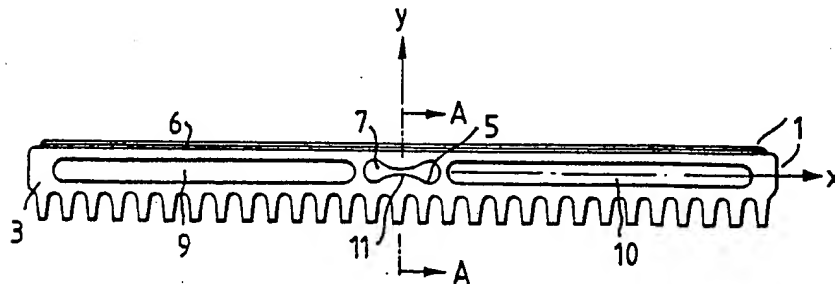
Assistant Examiner—Maurina Rachuba

Attorney, Agent, or Firm—Raymond J. De Vellis

[57] **ABSTRACT**

A trimmer for dry shavers having cutting screen mounted integral with the appliance and a cutter movable reciprocally along said cutting screen, formed of a cutter blade and a support. The support of the cutter is manufactured by the injection-molding technique and the cutter blade is injection-molded onto it when manufactured. Recesses of different shapes with central constrictions are provided in the cutter blade to receive the support material, said constrictions, despite the shrinkage of the support material, ensuring a secure zero-play material connection between the support and the cutter blade.

8 Claims, 5 Drawing Figures



18/3,K/10 (Item 10 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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004309268

WPI Acc No: 1985-136146/198523

XRPX Acc No: N85-102396

Electrically -driven beard trimmer - has attachments for cutting
hairs in nostrils and ears and for rotary nail file

Patent Assignee: BALOGH J (BALO-I)

Inventor: BALOGH J

Number of Countries: 003 Number of Patents: 001

Patent Family:

| Patent No | Kind | Date | Applicat No | Kind | Date | Week |
|-----------|------|----------|-------------|------|----------|----------|
| EP 143137 | A | 19850605 | EP 83810552 | A | 19831124 | 198523 B |

Priority Applications (No Type Date): EP 83810552 A 19831124

Patent Details:

| Patent No | Kind | Lan | Pg | Main IPC | Filing Notes |
|-----------|------|-----|----|----------|--------------|
| EP 143137 | A | G | 11 | | |

Designated States (Regional): CH DE LI

Electrically -driven beard trimmer - ...

...has attachments for cutting hairs in nostrils and ears and for
rotary nail file

...Abstract (Basic): An appliance for trimming a beard consists of a
housing (11) containing a miniature electric motor driven from a
rechargeable battery (19) or from the mains through a transformer. A...

...a bevel gear on an eccentric shaft which imparts a linear oscillating
motion to the moving blade of the beard trimmer (9...

...The connecting rod of the beard trimmer has a toothed rack which
engages a pinion to impart a rotary oscillating motion to a tool (14)
for cutting hairs in the nostrils or ears. The eccentric shaft has
a socket to receive a rotary nail file (12...

...ADVANTAGE - The appliance cuts hairs in the nostrils and ears without
risk of injury...

Title Terms: ELECTRIC ;

12

EUROPÄISCHE PATENTANMELDUNG

21 Anmeldenummer: 83810552.8

51 Int. Cl.⁴: **A 45 D 29/05**

22 Anmeldetag: 24.11.83

43 Veröffentlichungstag der Anmeldung: 05.06.85
Patentblatt 85/23

71 Anmelder: **Balogh, József, Diebold Schillingstrasse 24,
CH-6004 Luzern (Kanton Luzern) (CH)**

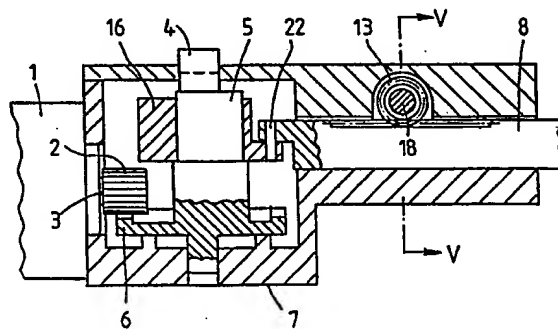
72 Erfinder: **Balogh, József, Diebold Schillingstrasse 24,
CH-6004 Luzern (Kanton Luzern) (CH)**

84 Benannte Vertragsstaaten: **CH DE LI**

74 Vertreter: **Veigo, Miroslav et al, Bovard AG
Patentanwälte VSP Optingenstrasse 16,
CH-3000 Bern 25 (CH)**

54 **Handgerät für die Körperpflege.**

57 Das Handgerät weist einen als Gehäuse ausgebildeten Griffteil auf. Im Gehäuse ist ein Kleinmotor (1) und ein Getriebekasten (7) untergebracht. Die Welle (3) des elektrischen Kleinmotors (1) trägt ein Ritzel (2), das in den Getriebekasten (7) hineinragt. Im Getriebekasten (7) ist eine zur Kleinmotorenwelle (3) senkrecht verlaufende Welle (4) vorgesehen, auf welcher ein Zahnrad (6) und ein Exzenter (5) fest aufgesetzt sind. Das Zahnrad (6) steht in Eingriff mit dem Ritzel (2) der Kleinmotorenwelle (3). Der Exzenter (5) steht in Verbindung mit einer Zahnstange (8). Den verschiedenen Körperpflegemitteln, die am Gerät abnehmbar befestigbar sind wird durch die drehende Getriebewelle (4) eine Kreisbewegung, eine gradlinige Hin- und Herbewegung oder eine Hin- und Herbewegung im Kreissektor erteilt. Bei der Benützung dieses Gerätes ist die Gefahr der Körperverletzung ausgeschlossen.



EP 0 143 137 A1

18/3,K/12 (Item 12 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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003242871

WPI Acc No: 1982-A3245E/198202

**Powdered dry shaving appts. with hair trimmer attachment - has
retractable reciprocating trimmer assembly attached to plastics
operating button**

Patent Assignee: SUNBEAM CORP (SUNG)

Inventor: COLEMAN D J; JACKSON W C; LUBE R R; SPOHR A R

Number of Countries: 006 Number of Patents: 008

Patent Family:

| Patent No | Kind | Date | Applicat No | Kind | Date | Week |
|------------|------|----------|-------------|------|----------|----------|
| GB 2078590 | A | 19820113 | | | | 198202 B |
| FR 2485427 | A | 19811231 | | | | 198206 |
| DE 3116512 | A | 19820218 | | | | 198208 |
| US 4389772 | A | 19830628 | US 83476643 | A | 19830318 | 198328 |
| GB 2078590 | B | 19831012 | | | | 198341 |
| CA 1154242 | A | 19830927 | | | | 198343 |
| US 4426777 | A | 19840124 | | | | 198406 |
| IT 1171343 | B | 19870610 | | | | 199004 |

Priority Applications (No. Type Date): US 80163743 A 19800627

Patent Details:

| Patent No | Kind | Lan | Pg | Main IPC | Filing Notes |
|------------|------|-----|----|----------|--------------|
| GB 2078590 | A | | 13 | | |

Powdered dry shaving appts. with hair trimmer attachment - ...

**...has retractable reciprocating trimmer assembly attached to plastics
operating button**

...Abstract (Basic): The **electric dry shaver** includes a movable long
hair clipper assembly which is slidable from a retracted position
within the **shaver** housing through a slot to an extended position in
which the clipping teeth of the **clipper** are exposed. The **clipper**
includes a relatively **fixed** blade or comb supported by a moulded
plastic part...

...The plastics part performs the functions of guiding the movable **clipper**
, providing a detent action for the movable **clipper** and
interconnecting the **clipper** assembly with a manually actuatable member
which extends through an opening in the end wall...

...Title Terms: **HAIR** ;

United States Patent [19]

Coleman et al.

[11] 4,426,777

[45] Jan. 24, 1984

[54] ELECTRIC DRY SHAVER

[75] Inventors: Donald J. Coleman, Lisle; Wilbur C. Jackson, Wheaton; Robert R. Lube, Countryside; Albert R. Spohr, Park Ridge, all of Ill.

[73] Assignee: Sunbeam Corporation, Chicago, Ill.

[21] Appl. No.: 476,643

[22] Filed: Mar. 18, 1983

| | | | |
|-----------|--------|----------------|-----------|
| 3,401,453 | 9/1968 | Bauer | 30/43.9 |
| 3,421,215 | 1/1969 | Bauer | 30/43.9 X |
| 3,590,482 | 7/1971 | Carr | 30/34.1 |
| 4,150,482 | 4/1979 | Beck et al. | 30/43.9 |
| 4,389,772 | 6/1983 | Coleman et al. | 30/43.9 |

Primary Examiner—Jimmy C. Peters

Attorney, Agent, or Firm—Neil M. Rose; Clifford A. Dean; Robert J. Fox

Related U.S. Application Data

[62] Division of Ser. No. 163,743, Jun. 27, 1980, Pat. No. 4,389,772.

[51] Int. Cl.³ B26B 19/42

[52] U.S. Cl. 30/34.2

[58] Field of Search 30/43.9, 43.92, 34 R, 30/34.1, 34.2

[56] References Cited

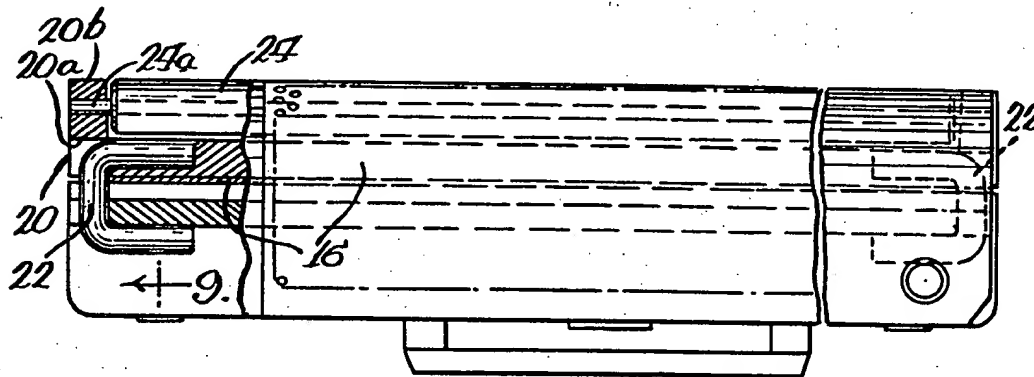
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| 2,696,665 | 12/1954 | Angst | 30/34.2 X |
| 2,880,503 | 4/1959 | Carissimi | 30/34.2 |
| 2,991,554 | 7/1961 | Somers | 30/34.2 |
| 3,181,237 | 5/1965 | Jepson et al. | 30/43.92 X |

[57] ABSTRACT

An electric dry shaver having a movable long hair clipper which is slidable from a retracted position within the shaver housing to an extended position in which the clipping teeth of the clipper are exposed. The clipper includes a relatively fixed blade or comb supported by a molded plastic part which performs the functions of guiding the movable clipper, providing a detent action for the movable clipper and interconnecting the clipper assembly with a manually actuable member which extends through the wall of the shaving housing. The shaver also includes a roller supported between a pair of shaving heads by the means for tensioning the flexible comb on its supporting frame.

3 Claims, 11 Drawing Figures



18/3,K/14 (Item 14 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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001947050

WPI Acc No: 1978-H6319A/197839

Oscillating cutter electric razor trimmer attachment drive -
has cranked lever tilted about axis perpendicular to cutter axis

Patent Assignee: GILLETTE CO (GILL)

Inventor: BUCHHOLZ A E

Number of Countries: 002 Number of Patents: 002

Patent Family:

| Patent No | Kind | Date | Applicat No | Kind | Date | Week |
|------------|------|----------|-------------|------|------|----------|
| US 4114264 | A | 19780919 | | | | 197839 B |
| GB 1533679 | A | 19781129 | | | | 197848 |

Priority Applications (No Type Date): GB 7627109 A 19760629

Oscillating cutter electric razor trimmer attachment drive...

...**has cranked lever tilted about axis perpendicular to cutter axis**

...Abstract (Basic): An **electric** dry **shaver** had a **cutter** mounted to oscillate about an axis for its shaving action. A driver, through an arc, is secured to the **cutter**. A **trimmer** element is reciprocated linearly, parallel to the **cutter** axis for a **hair trimming** action
...

...A coupling mechanism is selectively engaged between driver and **trimmer** element to convert the oscillation into linear reciprocation. This has a cranked lever which pivots about an axis perpendicular to both the **cutter** axis and the **trimmer** element.

...Title Terms: **ELECTRIC** ;

[54] **CLIPPER MECHANISM**

[75] Inventor: Alexis Emmanuel Buchholz,
Hauterive, Switzerland

[73] Assignee: The Gillette Company, Boston, Mass.

[21] Appl. No.: 809,686

[22] Filed: Jun. 24, 1977

[30] **Foreign Application Priority Data**

Jun. 29, 1976 [GB] United Kingdom 27109/76

[51] Int. Cl.² B26B 19/10

[52] U.S. Cl. 30/34.1

[58] Field of Search 30/34.1

[56] **References Cited**

U.S. PATENT DOCUMENTS

2,370,543 2/1945 Jepson 30/34.1
2,370,544 2/1945 Jepson 30/34.1
2,371,242 3/1945 Jenson 30/34.1

3,440,724 4/1969 Wich 30/34.1

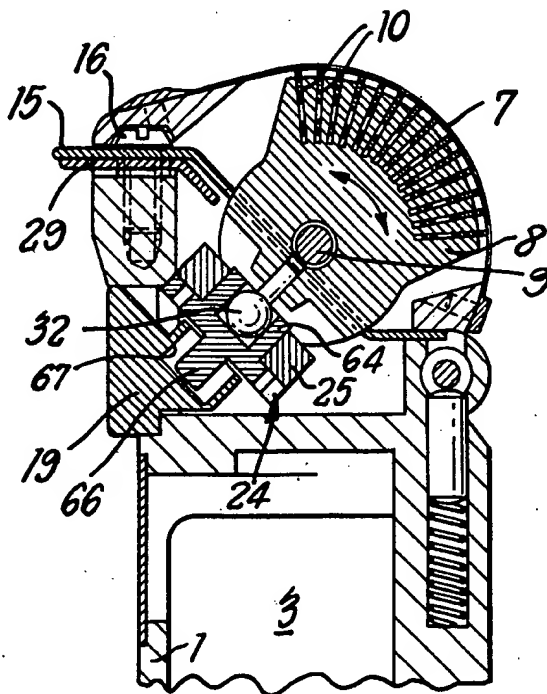
Primary Examiner—Gary L. Smith
Attorney, Agent, or Firm—Richard A. Wise; Donald E. Mahoney

[57]

ABSTRACT

An electric dry shaver comprising a cutter mounted for arcuate oscillation about an axis to effect a shaving action, a driver secured to said cutter for arcuate oscillation about said axis, a trimmer element mounted for linear reciprocation parallel to said cutter axis to effect a hair trimming action, and a coupling mechanism selectively engageable between said driver and said trimmer element to convert arcuate driver oscillation into linear trimmer reciprocation via the intermediary of a cranked lever mounted for pivotal oscillation about an axis perpendicular to both the cutter axis and the trimmer element.

9 Claims, 6 Drawing Figures



18/3,K/16 (Item 16 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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001256502

WPI Acc No: 1975-E0317W/197515

Auxiliary trimmer **assembly for electric shaver - has**
reciprocating **blade assembly pivotally attached to shaver**

Patent Assignee: SCHICK INC (EVER)

Number of Countries: 002 Number of Patents: 002

Patent Family:

| Patent No | Kind | Date | Applicat No | Kind | Date | Week |
|------------|------|----------|-------------|------|------|----------|
| US 3874079 | A | 19750401 | | | | 197515 B |
| CA 1019549 | A | 19771101 | | | | 197745 |

Priority Applications (No Type Date): US 74477021 A 19740606

Auxiliary trimmer **assembly for electric shaver - ...**

...has reciprocating blade assembly pivotally attached to shaver

...Abstract (Basic): The head assembly comprises a pair of **trimmer** blades arranged for side-by-side reciprocation. The upper margins of the blades are notched to form a precision cutting surface for long **hair** , and the lower margins are pivotally attached to the **shaver** housing to form a unitary blade assembly whereby the precision cutting surface can be positioned tangentially to the **stationary** comb member for assisting the close shaving head in cutting occasional long hairs, or aways from the housing for precision **trimming** or **sideburns** , moustaches and other long **hair** areas.

Title Terms: **AUXILIARY** ;

United States Patent [19]

Waters et al.

[11] 3,874,079

[45] Apr. 1, 1975

[54] **AUXILIARY TRIMMER ASSEMBLY FOR AN ELECTRIC SHAVER**

1,004,520 3/1957 Germany 30/34.1
827,768 2/1960 United Kingdom 30/34.1

[75] Inventors: Robert S. Waters; Donald L. Shortlidge, both of Lancaster, Pa.

Primary Examiner—Al Lawrence Smith
Assistant Examiner—Marc R. Davidson

[73] Assignee: Schick Incorporated, Lancaster, Pa.

[22] Filed: June 6, 1974

[21] Appl. No.: 477,021

[52] U.S. Cl. 30/34.1, 30/43.92

[51] Int. Cl. B26b 19/06, B26b 19/10, B26b 19/02

[58] Field of Search 30/34.1, 43.92, 90

[56] References Cited

UNITED STATES PATENTS

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|-----------|---------|----------------|-----------|
| 3,673,683 | 7/1972 | Fischer | 30/34.1 |
| 3,714,710 | 2/1973 | Daniels et al. | 30/34.1 |
| 3,763,558 | 10/1973 | Bauerle | 30/34.1 |
| 3,783,508 | 1/1974 | Brown et al. | 30/34.1 X |

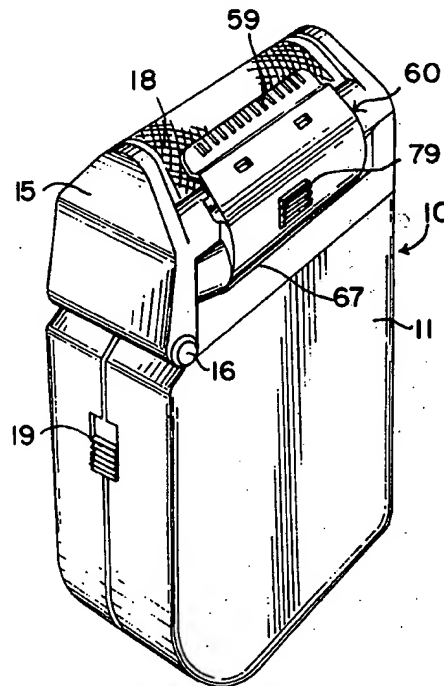
FOREIGN PATENTS OR APPLICATIONS

| | | | |
|-----------|--------|---------|---------|
| 1,943,794 | 3/1970 | Germany | 30/34.1 |
|-----------|--------|---------|---------|

[57] ABSTRACT

An auxiliary trimmer head assembly for an electric shaver of the type having a close shaving head including a rounded perforated stationary comb member comprises a pair of trimmer blades arranged for side-by-side reciprocation. The upper margins of the blades are notched to form a precision cutting surface for long hair, and the lower margins are pivotally attached to the shaver housing to form a unitary blade assembly whereby the precision cutting surface can be positioned tangentially to the stationary comb member for assisting the close shaving head in cutting occasional long hairs, or away from the housing for precision trimming of sideburns, moustaches and other long hair areas.

13 Claims, 9 Drawing Figures



18/3,K/17 (Item 17 from file: 347)
DIALOG(R)File 347:JAPIO
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06115711 **Image available**
ATTACHMENT FOR TRIMMING

PUB. NO.: 11-057246 [JP 11057246 A]
PUBLISHED: March 02, 1999 (19990302)
INVENTOR(s): OGAWA HITOSHI
APPLICANT(s): MATSUSHITA ELECTRIC WORKS LTD
APPL. NO.: 09-228686 [JP 97228686]
FILED: August 26, 1997 (19970826)

ATTACHMENT FOR TRIMMING

ABSTRACT

PROBLEM TO BE SOLVED: To finish **trimming** by constituting comb teeth in such a state as providing them only from one end to the intermediate part of the cut range of a blade part in an **attachment** which is detachably attached to the blade part of the **hair clippers** for hairdressing and have a plurality of the comb teeth whose height is gradually getting higher from one end toward the other end.

SOLUTION: An **electric hair clippers** 3 are provided with a blade part 2 in the tip of the head part 6 and a **mobile** blade is reciprocated to the **fixed** blade so as to cut the **hair** H. A **trimming attachment** A is detachably attached to the **hair clippers** 3 in such a state that a cover fit part 9 is coveringly fitted to the head part 6 of the **hair clippers** 3. This **attachment** A has a plurality of comb teeth 1, whose height is gradually getting higher from...

...intermediate part of the cut range of the blade 2 so as to eliminate any **hair** from projecting in haircut and the **trimming** style is thus finished by only the **attachment** A.

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18/3,K/18 (Item 18 from file: 347)
DIALOG(R)File 347:JAPIO
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05675278 **Image available**
ELECTRIC RAZOR

PUB. NO.: 09-290078 [JP 9290078 A]
PUBLISHED: November 11, 1997 (19971111)
INVENTOR(s): TAKAO NOBUTOSHI
APPLICANT(s): SANYO ELECTRIC CO LTD [000188] (A Japanese Company or
Corporation), JP (Japan)
APPL. NO.: 08-107573 [JP 96107573]
FILED: April 26, 1996 (19960426)

ELECTRIC RAZOR

ABSTRACT

PROBLEM TO BE SOLVED: To extend the service life of a thin outer **cutter** , and shave a **mustache** short with the thin outer **cutter** by enabling an outer **cutter** frame to be mounted on a case turning over the front and reverse sides...

...SOLUTION: This **electric razor** has a **trimmer** 6 on the surface of a case 1, as well as an outer **cutter** frame 2 formed to have an aperture 2a for inserting the **trimmer** 6 and detachably mounted on the end of the case 1. In **addition** , the **electric razor** is formed to have the aperture 2a for the **trimmer** 6 on both of the front and reverse sides of the outer **cutter** frame 2, and this outer **cutter** frame 2 is formed to be detachably mounted on the case 1 turning over the...

18/3,K/19 (Item 19 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2004 JPO & JAPIO. All rts. reserv.

04498445 **Image available**
RECIPROCATION TYPE **ELECTRIC RAZOR**

PUB. NO.: 06-142345 [JP 6142345 A]
PUBLISHED: May 24, 1994 (19940524)
INVENTOR(s): OTSUKA HARUTAKA
IWASAKI SHIGEZAEMON
APPLICANT(s): MATSUSHITA ELECTRIC WORKS LTD [000583] (A Japanese Company or
Corporation), JP (Japan)
APPL. NO.: 04-303387 [JP 92303387]
FILED: November 13, 1992 (19921113)
JOURNAL: Section: M, Section No. 1659, Vol. 18, No. 446, Pg. 155,
August 19, 1994 (19940819)

RECIPROCATION TYPE **ELECTRIC RAZOR**

ABSTRACT

PURPOSE: To enable the shaving of **hair** accurately and short at a recessed part such as that under a jaw or an...

... reciprocally to slide in contact with the internal surface of the outer blade while a **trimmer** blade T as to comprise a comb-shaped **fixed** blade 3 and a comb-shaped **mobile** blade 4 sliding in contact with the **fixed** blade and the main blade M and the **trimmer** blade T set in parallel with the main blade M are both curved in the...

... blade M so that both the blades contacts closely even a hollow skin easily. In **addition**, the edge line of the main blade M and a slide contact surface between the **fixed** blade 3 and the **mobile** blade 4 of the **trimmer** blade T are set at a **fixed** interval D over the entire area. This accomplishes a cooperative action of cutting long **beard** with the **trimmer** blade T and shaving it short with the main blade M efficiently over the entire...

18/3,K/20 (Item 20 from file: 347)
DIALOG(R)File 347:JAPIO
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00488656

ELECTRIC HAIR CLIPPER

PUB. NO.: 54-140656 [JP 54140656 A]
PUBLISHED: November 01, 1979 (19791101)
INVENTOR(s): HATA SHUNICHI
APPLICANT(s): MATSUSHITA ELECTRIC WORKS LTD [000583] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 53-048936 [JP 7848936]
FILED: April 24, 1978 (19780424)
JOURNAL: Section: M, Section No. 87, Vol. 04, No. 3, Pg. 161, January 11, 1980 (19800111)

ELECTRIC HAIR CLIPPER

ABSTRACT

PURPOSE: To easily trim up a **hair** at a tapered part in the rear of a right and a left **ear**, by fitting an **attachment** which leads **hair** into a blade part and can freely rotate in the direction which crosses a traverse...

...CONSTITUTION: When an **attachment** 6, which is attached in such manner that introduces **hair** to a blade part 5, is placed in parallel to the blade part 5, spaces...

...ends a, b in the sliding direction of a movable comb blade 4 and the **attachment** 6 are equal, and as a result, a **hair trimming** height is all the same, and thus, a normal **trimming** is performed. At that time a **hair** cutting height can be regulated by positioning the **attachment** 6 in proximity with and apart from the blade part 5. Or when the spaces...

...ends a, b in the sliding direction of the movable comb blade 4 and the **attachment** 6 are adjusted so that one space will be low and the other space high, the **hair trimming** height can be changed and **trimming** at a tapered part in the rear of an **ear** can also be freely performed.

| Set | Items | Description |
|-----|---------|---|
| S1 | 46704 | CUTTER? ? OR CLIPPER? ? OR SHAVER? ? OR RAZOR? ? OR (CLIP? - ??? OR CUTT??? OR SHAV??? OR TRIMM???) (3N) (TOOL? OR INSTRUMEN- T? OR IMPLEMENT?) |
| S2 | 126244 | HAIR OR BEARD OR MUSTACH? OR SIDEBURN? OR SIDE()BURN? OR E- AR OR EARS OR NOSE? ? OR NECK? ? |
| S3 | 528656 | ELECTRIC? OR POWERDRIVEN? OR POWER()DRIVEN OR MOTORDRIVEN - OR MOTOR()DRIVEN |
| S4 | 22052 | TRIMM??? OR TRIMMER? ? OR BEARDTRIM? OR MUSTACHETRIM? OR S- IDEBURNTRIM? OR SIDEBURNSTRIM? OR HAIRTRIM? |
| S5 | 173217 | ATTACHMENT? ? OR ACCESSORY? OR ACCESSORIE? |
| S6 | 1119498 | AUXILIAR? OR SUPPLEMENTA? OR ADAPTER? ? OR ADDON? OR ADD()- (ON OR ONS) OR ADDITION?? |
| S7 | 259955 | IMPROVER? ? OR IMPROVEMENT? ? OR APPURTENAN? |
| S8 | 25224 | REMOVABL?(2N) (ATTACH????? OR SECUR??? OR AFFIX????? OR FAS- TEN??? OR APPEND??? OR CONNECT??? OR ADJOIN?????) OR DETACHBL? |
| S9 | 109183 | STATIONARY? OR (NON OR "NOT" OR UN) () (MOVING OR MOTILE OR - MOBILE) OR NONMOVING OR UNMOVING OR NOTMOVING OR NONMOTILE OR UNMOTILE OR NOTMOTILE OR UNMOBILE OR NONMOBILE OR NOTMOBILE |
| S10 | 565466 | IMMOBILE OR IMMOTILE OR FIXED OR RIGID OR STEADY |
| S11 | 491241 | RECIPROCATING OR MOVING OR MOTILE OR MOBILE OR IN()MOTION - OR BACK????(2W) (FORTH OR FORWARD) OR MOVABLE OR MOVEABLE |
| S12 | 7 | "TO" (2W) FRO |
| S13 | 853 | IC=B25F? |
| S14 | 2755 | S1 AND S2 AND S3 |
| S15 | 43 | S14 AND S4(5N)S5:S7 |
| S16 | 41 | S15 AND S8:S13 |
| S17 | 43 | S15:S16 |
| S18 | 43 | IDPAT (sorted in duplicate/non-duplicate order) |

? show files

File 348:EUROPEAN PATENTS 1978-2004/Jan W03

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File 349:PCT FULLTEXT 1979-2002/UB=20040122,UT=20040115

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18/5/26 (Item 26 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00655549

Apparatus for removing body hair

Gerat zum Entfernen von Korperhaaren

Appareil pour enlever des poils du corps

PATENT ASSIGNEE:

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PATENT (CC, No, Kind, Date): EP 630596 A1 941228 (Basic)

EP 630596 B1 980923

APPLICATION (CC, No, Date): EP 94106795 940430;

PRIORITY (CC, No, Date): DE 4320958 930624

DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; NL; PT

INTERNATIONAL PATENT CLASS: A45D-026/00;

ABSTRACT EP 630596 A1 (Translated)

An apparatus (1) for removing body hair is described, onto which apparatus there can be fitted alternatively a first attachment part (3) with an epilation cylinder (5) or a second attachment part (20) with a long- hair cutter (22). The attachment part (20) with the long- hair cutter (22) has a razor or upper blade (36) which can be driven via a gear and carries out an alternating back and forth movement in relation to a comb or lower blade (37).

TRANSLATED ABSTRACT WORD COUNT: 82

ABSTRACT EP 630596 A1

Es wird ein Gerat (1) zum Entfernen von Korperhaaren beschrieben, auf das alternativ ein erstes Aufsatzteil (3) mit einem Epilationszylinder (5) oder ein zweites Aufsatzteil (20) mit einem Langhaarschneider (22) aufgesetzt werden kann. Das Aufsatzteil (20) mit dem Langhaarschneider (22) weist eine uber ein Getriebe antreibbare Klinge bzw. Obermesser (36) auf, welche eine alternierend hin- und hergehende Bewegung bzgl. eines Kammes bzw. Untermessers (37) ausfuhrt. (siehe Patentzeichnung im original Dokument)

ABSTRACT WORD COUNT: 72

LEGAL STATUS (Type, Pub Date, Kind, Text):

Oppn Rejected: 030716 B1 Date of rejection of the opposition procedure: 20030312

Application: 941228 A1 Published application (A1with Search Report ;A2without Search Report)

Examination: 950315 A1 Date of filing of request for examination: 950114

*Assignee: 951102 A1 Applicant (transfer of rights) (change): Braun Aktiengesellschaft (205465) Frankfurt am Main (DE) (applicant designated states: AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;NL;PT)

*Assignee: 951102 A1 Previous applicant in case of transfer of rights (change): Braun Aktiengesellschaft (205463) Frankfurt am Main (DE) (applicant designated states: AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;NL;PT)

Examination: 961002 A1 Date of despatch of first examination report: 960814

Grant: 980923 B1 Granted patent

Oppn: 990825 B1 Opposition 01/19990618 Opposition filed
Matsushita **Electric** Works, Ltd. (94020) 1048,
Oaza-Kadoma, Kadoma-shi Osaka 571, Japan JP
(Representative:)Goddar, Heinz J., Dr. (4231)
FORRESTER & BOEHMERT Franz-Joseph-Strasse 38
80801 Munchen (DE)
02/19990623 Admissible opposition
MEPRO-EPILADY (117750) Kibbutz Hagoshrim 12225
D.N. Upper Galilee IL
(Representative:)VOSSIUS & PARTNER (100314)
Siebertstrasse 4 81675 Munchen (DE)
Assignee: 991215 B1 Transfer of rights to new proprietor: Braun
GmbH (205469) Kronberg DE

LANGUAGE (Publication,Procedural,Application): German; German; German
FULLTEXT AVAILABILITY:

| Available Text | Language | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS B | (English) | 9839 | 629 |
| CLAIMS B | (German) | 9839 | 545 |
| CLAIMS B | (French) | 9839 | 738 |
| SPEC B | (German) | 9839 | 2821 |
| Total word count - document A | | | 0 |
| Total word count - document B | | | 4733 |
| Total word count - documents A + B | | | 4733 |

United States Patent [19]
Heintke et al.

[11] Patent Number: 5,611,804
[45] Date of Patent: Mar. 18, 1997

[54] APPLIANCE FOR THE REMOVAL OF BODY HAIRS

5,190,559 3/1993 Gabion et al. .
5,234,441 8/1993 Heintke et al. .

[75] Inventors: Hans-Eberhard Heintke,
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[73] Assignee: Braun Aktiengesellschaft, Kronberg,
Germany

[21] Appl. No.: 257,684

[22] Filed: Jun. 9, 1994

[30] Foreign Application Priority Data

Jun. 24, 1993 [DE] Germany 43 20 958.0

[51] Int. Cl.⁶ A45D 26/00; A45D 27/00

[52] U.S. Cl. 606/133; 30/34.05

[58] Field of Search 606/133, 131;
30/34.05, 90, 45, 43.92, 43.91

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Primary Examiner—Mickey Yu

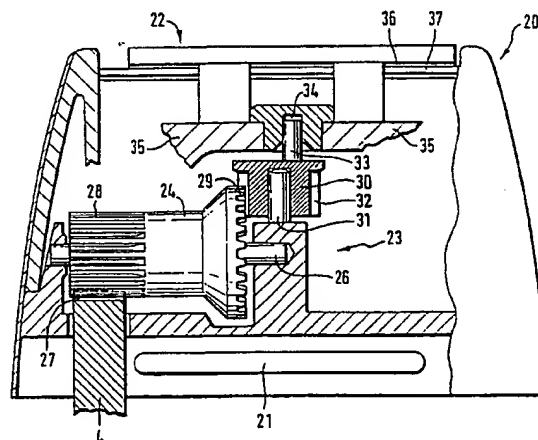
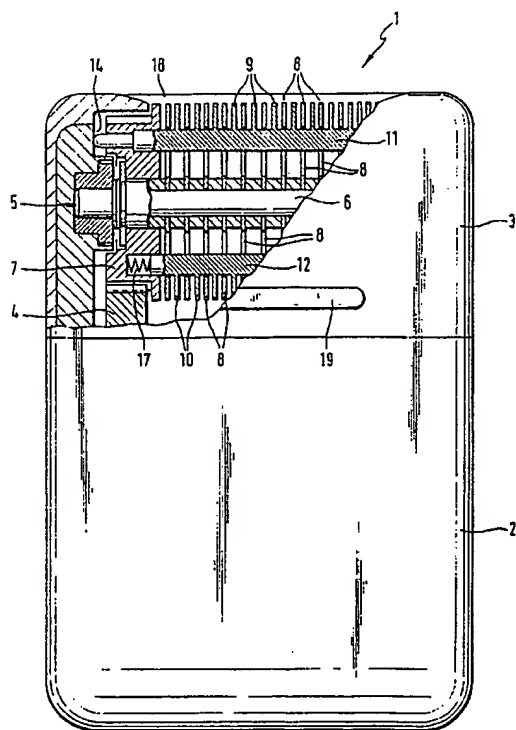
Attorney, Agent, or Firm—Fish & Richardson, P.C.

[57]

ABSTRACT

The invention is directed to an appliance for the removal of body hairs which is adapted to receive a first attachment incorporating an epilating cylinder or, alternatively, a second attachment incorporating a long-hair trimmer. The attachment incorporating the long-hair trimmer includes a blade or an outer cutter adapted to be driven by a gear arrangement and executing a reciprocating motion in alternate directions relative to a comb or an inner cutter.

15 Claims, 3 Drawing Sheets



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As becomes apparent from FIG. 3, the engaging means 33 engages within a groove 34 in a supporting structure 35 supporting a blade-like outer cutter 36. The outer cutter 36 extends across the full width of the long-hair trimmer 22 and is displaceable in this direction together with the supporting structure 35. To this end, the supporting structure 35 includes guiding means enabling the supporting structure 35 to perform a reciprocating motion together with the blade 36.

With regard to the reciprocating motion described, the groove 34 engaged by the engaging means 33 is arranged at an angle of 90 degrees such as to enable the engaging means 34 to reciprocate equally inside its groove 34.

Arranged in parallel to the outer cutter 36 is an inner cutter 37 which, like the outer cutter 36, extends across the entire width of the long-hair trimmer 22, being however fixedly held in the second attachment 20. The outer cutter 36 and the inner cutter 37 are located at the forward end of the second attachment 20 facing the skin surface when in use.

Rotation of the driving gear 4 causes rotation of the crown gear 24 and thus of the pinion 30 about its spindle 31. The eccentric arrangement of the engaging means 33 relative to the spindle 31 results in a rotation of the pinion 30 and a reciprocating motion of the supporting structure 35 together with the outer cutter 36. At the same time, the engaging means 33 reciprocates equally inside its groove 34. Thus, the engaging means 33 acts to convert the rotary motion of the pinion 30 into a linearly oscillating motion of the outer cutter 36.

Body hairs that have entered the space between the teeth of the outer cutter 36 and the teeth of the inner cutter 37 are then cut off by the linearly oscillating motion of the outer cutter 36 while the inner cutter 37 remains stationary.

It will be understood, of course, that the functions of outer cutter 36 and inner cutter 37 may be altered to the effect that the inner cutter 37 is driven to oscillate whilst the outer cutter 36 remains stationary. To ensure a highly advantageous short length of the hairs to be removed, it is essential that the outer cutter, whether oscillatory or stationary, be of an extremely thin configuration, practically a foil of a thickness in the range of 0.2 mm or less.

The appliance 1 for the removal of body hairs is preferably used as follows:

First, the second attachment 20 is mounted on the casing 2. On turning the appliance 1 on, the body hairs are then cut off on the skin surface by means of the long-hair trimmer 22. The user then waits for an individually varying period of about one week. Then the first attachment 3 is mounted on the casing 2 and the appliance 1 is turned on. The body hairs meanwhile grown back to about equal length are then firmly gripped and plucked out by the epilating cylinder 5 accommodated in the first attachment 3.

The possibility also exists to utilize the first attachment 3 with its epilating cylinder 5 and/or the second attachment 20 with its long-hair trimmer 22 independently of each other. Special applications also allow the epilation head to be used first, followed by the long-hair trimmer 22.

What is claimed is:

1. An appliance for the removal of human body hairs comprising:

- a casing;
- a driving gear carried in the casing and adapted to be driven by a motor;
- a first attachment that attaches to, and detaches from, the casing, the first attachment configured as an epilation

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head and comprising an epilating cylinder mounted in the epilation head, said epilating cylinder adapted to be rotated by the driving gear for gripping and extracting the body hairs; and

a second attachment that attaches to, and detaches from, the casing in exchange for the first attachment, the second attachment comprising a depilator incorporating a long-hair trimmer and a gear arrangement adapted to be driven by the driving gear, wherein said long hair trimmer includes a first cutter which is adapted to be driven by said gear arrangement to perform a reciprocating motion in alternate directions relative to a second cutter.

2. An appliance for the removal of human body hairs comprising:

- a casing;
- a driving gear carried in the casing and adapted to be driven by a motor;
- a first attachment that attaches to, and detaches from, the casing, the first attachment configured as an epilation head and comprising an epilating cylinder mounted in the epilation head, said epilating cylinder adapted to be rotated by the driving gear for gripping and extracting the body hairs; and

a second attachment that attaches to, and detaches from, the casing in exchange for the first attachment, the second attachment comprising a depilator incorporating a long-hair trimmer and a gear arrangement adapted to be driven by the driving gear, wherein said long hair trimmer includes a first cutter which is adapted to be driven by said gear arrangement to perform a reciprocating motion in alternate directions relative to a second cutter wherein during operation the first cutter oscillates at an oscillating frequency and the epilating cylinder rotates at a rotational frequency, and wherein the gear arrangement has a transmission ratio such that the oscillating frequency of the first cutter is about three to seven times the rotational frequency of the epilating cylinder.

3. An appliance for the removal of human body hairs comprising:

- a casing;
- a driving gear carried in the casing and adapted to be driven by a motor;
- a first attachment that attaches to, and detaches from, the casing, the first attachment configured as an epilation head and comprising an epilating cylinder mounted in the epilation head, said epilating cylinder adapted to be rotated by the driving gear for gripping and extracting the body hairs; and

a second attachment that attaches to, and detaches from, the casing in exchange for the first attachment, the second attachment comprising a depilator incorporating a long-hair trimmer and a gear arrangement adapted to be driven by the driving gear, wherein said long hair trimmer includes a first cutter which is adapted to be driven by said gear arrangement to perform a reciprocating motion in alternate directions relative to a second cutter wherein the gear arrangement comprises an angular gear arrangement converting the rotary motion of the driving gear into a reciprocating motion of the first cutter.

4. An appliance for the removal of human body hairs comprising:

- a casing;

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- a driving gear carried in the casing and adapted to be driven by a motor;
- a first attachment that attaches to, and detaches from, the casing, the first attachment configured as an epilation head and comprising an epilating cylinder mounted in the epilation head, said epilating cylinder adapted to be rotated by the driving gear for gripping and extracting the body hairs; and
- a second attachment that attaches to, and detaches from, the casing in exchange for the first attachment, the second attachment comprising a depilator incorporating a long-hair trimmer and a gear arrangement adapted to be driven by the driving gear, wherein said long hair trimmer includes a first cutter which is adapted to be driven by said gear arrangement to perform a reciprocating motion in alternate directions relative to a second cutter wherein the gear arrangement further comprises a crown gear and a pinion that includes an eccentrically arranged engaging member coupled to the first cutter, said crown gear adapted to be driven by the driving gear and meshing with said pinion.
5. An attachment as claimed in claim 1 wherein the gear arrangement comprises an angular gear arrangement converting the rotary motion of the driving gear into a reciprocating motion of the cutter.
6. An attachment as claimed in claim 5 wherein said second cutter is a stationary cutter.
7. An attachment as claimed in claim 2 wherein said second cutter is a stationary cutter.
8. An attachment as claimed in claim 3 wherein said second cutter is a stationary cutter.
9. An attachment as claimed in claim 4 wherein said second cutter is a stationary cutter.
10. An appliance as claimed in any one of the claims 6 to 9, wherein one of said first or second cutters comprises an outer cutter configured in the manner of a foil of a thickness of less than 0.2 mm.
11. An attachment as claimed in any one of the claims 6 to 8, wherein the gear arrangement further comprises a crown gear and a pinion that includes an eccentrically arranged engaging member coupled to the 1st cutter, said crown gear adapted to be driven by the driving gear and meshing with said pinion.

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12. A method of using an appliance for removing human body hairs, said appliance including a motor, said method comprising:

- attaching a first attachment to the appliance, said first attachment including a long hair trimmer that is operated by said motor;
- using the appliance with the first attachment attached thereto to trim the body hairs;
- detaching the first attachment;
- with the first attachment detached, attaching a second attachment to the appliance, said second attachment including an epilator cylinder that is rotated by said motor; and
- using the appliance with the second attachment attached thereto to grip and pluck the body hairs.

13. The method of claim 12 wherein the step of using the appliance with the second attachment attached thereto to grip and pluck the body hairs occurs more than about a day after the step of using the appliance with the first attachment attached thereto to trim the body hairs.

14. The method of claim 13 wherein the step of using the appliance with the second attachment attached thereto to grip and pluck the body hairs occurs between 3 to 12 days after the step of using the appliance with the first attachment attached thereto to trim the body hairs.

15. An appliance for the removal of human body hairs comprising:

- a casing;
- a driving gear carried in the casing and adapted to be driven by a motor;
- a first attachment that attaches to, and detaches from, the casing, the first attachment configured as an epilation head and comprising an epilating cylinder mounted in the epilation head, said epilating cylinder adapted to be rotated by the driving gear for gripping and extracting the body hairs; and
- a second attachment that attaches to, and detaches from, the casing in exchange for the first attachment, the second attachment comprising a depilator incorporating a long-hair trimmer for cutting the body hairs.

* * * * *

18/5/32 (Item 32 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00888527 **Image available**

SHAVING SYSTEMS AND ADJUSTABLE TRIMMERS THEREFOR
SYSTEMES DE RASAGE ET RASOIRS AJUSTABLES UTILISES DANS CES SYSTEMES DE
RASAGE

Patent Applicant/Assignee:

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Inventor(s):

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Legal Representative:

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Patent and Priority Information (Country, Number, Date):

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Application: WO 2001US27192 20010831 (PCT/WO US0127192)

Priority Application: US 2000231407 20000908; US 2001925061 20010808

Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ

DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ

LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG

SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

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Main International Patent Class: B26B-019/20

Publication Language: English

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Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 14569

English Abstract

By providing a separate and independent **hair** trimmer or trimming assembly (26) which is incorporated into a **shaver** system (20) and is controllably **movable** directly into a variety of alternate positions for providing enhanced cutting of **hair** fibers, a substantially improved, close and comfortable shaving system (20) is obtained which effectively cuts both short **hair** and long **hair**. By employing a single, multi-positionable, switch member (30) which cooperates with a movement control system (60, 61, 62, 64) incorporated into a trimmer assembly (26), user control is provided for altering the position of the trimmer assembly (26) for placing the trimmer assembly (26) directly and any precisely desired orientation or location. In **addition**, in the preferred embodiment, the **trimmer** assembly (26) incorporates a pair of specially constructed cutting elements (34, 35) formed thereon for providing enhanced cutting and/or trimming capabilities in a wide variety of alternate operations.

French Abstract

L'invention concerne un systeme de rasage (20) qui, du fait qu'il comporte un rasoir ou un ensemble rasoir-effileur (26), separe, independant et susceptible d'etre deplace de maniere regulee et directe dans une variete de positions alternees permettant une coupe amelioree des poils, constitue un systeme de rasage (20) sensiblement ameliore, permettant un rasage de pres et confortable et coupant efficacement aussi bien les poils courts que les poils longs. Un element de commutation (30)

unique, a positions multiples, cooperant avec un systeme de commande des mouvements (60, 61, 62, 64), incorpore dans un ensemble rasoir-effileur (26), fournit une commande d'utilisateur permettant de changer la position de l'ensemble rasoir-effileur (26) afin de placer l'ensemble rasoir-effileur (26) directement et precisement dans n'importe laquelle des orientations ou positions voulues. De plus, dans le mode de realisation prefere, l'ensemble rasoir-effileur (26) comprend une paire d'element coupants (34, 35) specialement concus et dispose sur celui-ci afin de permettre une coupe et/ou une coupe d'entretien ameliorees dans une grande variete d'operations differentes.

Legal Status (Type, Date, Text)

Publication 20020321 A1 With international search report.

Examination 20030109 Request for preliminary examination prior to end of 19th month from priority date



US006601302B2

(12) **United States Patent**
Andrew

(10) **Patent No.:** **US 6,601,302 B2**
(45) **Date of Patent:** **Aug. 5, 2003**

(54) **SHAVING SYSTEMS AND ADJUSTABLE TRIMMERS THEREFOR**

(75) **Inventor:** Michael A. Andrew, Milford, CT (US)

(73) **Assignee:** Remington Corporation, L.L.C., Bridgeport, CT (US)

(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) **Appl. No.:** 09/925,061

(22) **Filed:** Aug. 8, 2001

(65) **Prior Publication Data**

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Related U.S. Application Data

(60) Provisional application No. 60/231,407, filed on Sep. 8, 2000.

(51) **Int. Cl.⁷** B26B 19/20

(52) **U.S. Cl.** 30/34.1; 30/43.1; 30/43.9

(58) **Field of Search** 30/34.1, 43.92, 30/34.05, 43.6, 43.9, 346.51

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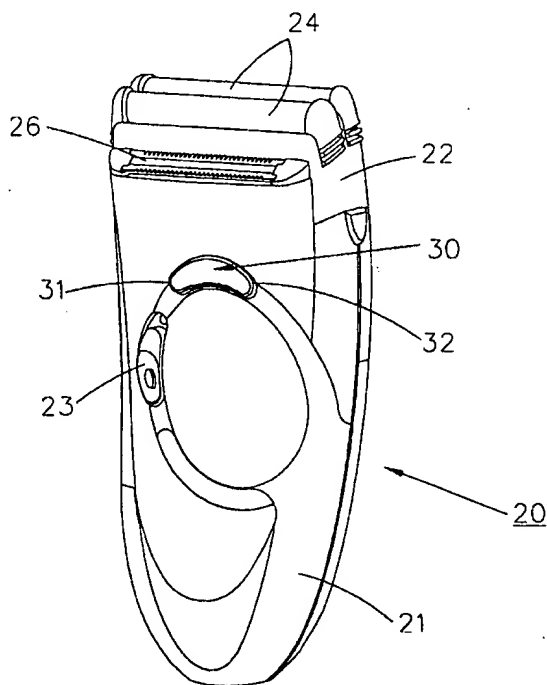
Primary Examiner—Hwei-Siu Payer

(74) *Attorney, Agent, or Firm*—Melvin I. Stoltz

(57) **ABSTRACT**

By providing a separate and independent hair trimmer or trimming assembly which is incorporated into a shaver system and is controllably movable directly into a variety of alternate positions for providing enhanced cutting of hair fibers, a substantially improved, close and comfortable shaving system is obtained which effectively cuts both short hair and long hair. By employing a single, multi-positionable, switch member which cooperates with a movement control system incorporated into a trimmer assembly, user control is provided for altering the position of the trimmer assembly for placing the trimmer assembly directly and any precisely desired orientation or location. In addition, in the preferred embodiment, the trimmer assembly incorporates a pair of specially constructed cutting elements formed thereon for providing enhanced cutting and/or trimming capabilities in a wide variety of alternate operations.

27 Claims, 40 Drawing Sheets



| Set | Items | Description |
|-----|---------|---|
| S1 | 71521 | CUTTER? ? OR CLIPPER? ? OR SHAVER? ? OR RAZOR? ? OR (CLIP? - ??? OR CUTT??? OR SHAV??? OR TRIMM???) (3N) (TOOL? OR INSTRUMEN- T? OR IMPLEMENT?) |
| S2 | 340191 | HAIR OR BEARD OR MUSTACH? OR SIDEBURN? OR SIDE()BURN? OR E- AR OR EARS OR NOSE? ? OR NECK? ? |
| S3 | 2357311 | ELECTRIC? OR POWERDRIVEN? OR POWER()DRIVEN OR MOTORDRIVEN - OR MOTOR()DRIVEN |
| S4 | 18070 | TRIMM??? OR TRIMMER? ? OR BEARDTRIM? OR MUSTACHETRIM? OR S- IDEBURNTRIM? OR SIDEBURNSTRIM? OR HAIRTRIM? |
| S5 | 164319 | ATTACHMENT? ? OR ACCESSORY? OR ACCESSORIE? |
| S6 | 2497515 | AUXILIAR? OR SUPPLEMENTA? OR ADAPTER? ? OR ADDON? OR ADD()- (ON OR ONS) OR ADDITION?? |
| S7 | 892345 | IMPROVER? ? OR IMPROVEMENT? ? OR APPURTENAN? |
| S8 | 265 | REMOVABL?(2N) (ATTACH????? OR SECUR??? OR AFFIX????? OR FAS- TEN??? OR APPEND??? OR CONNECT??? OR ADJOIN????) OR DETACHBL? |
| S9 | 173495 | STATIONARY? OR (NON OR "NOT" OR UN) () (MOVING OR MOTILE OR - MOBILE) OR NONMOVING OR UNMOVING OR NOTMOVING OR NONMOTILE OR UNMOTILE OR NOTMOTILE OR UNMOBILE OR NONMOBILE OR NOTMOBILE |
| S10 | 877983 | IMMOBILE OR IMMOTILE OR FIXED OR RIGID OR STEADY |
| S11 | 651843 | RECIPROCATING OR MOVING OR MOTILE OR MOBILE OR IN()MOTION - OR BACK????(2W) (FORTH OR FORWARD) OR MOVABLE OR MOVEABLE |
| S12 | 0 | "TO" (2W) FRO |
| S13 | 4940 | DETACHABL? |
| S14 | 127 | S1 AND S2 AND S3 |
| S15 | 0 | S14 AND S4 AND S5:S7 |
| S16 | 18 | S14 AND S4:S7 |
| S17 | 4 | S14:S16 AND S8:S13 |
| S18 | 21 | S16:S17 |
| S19 | 20 | RD (unique items) |

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File 94:JICST-EPlus 1985-2004/Jan W2
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| Set | Items | Description |
|-----|----------|---|
| S1 | 379693 | CUTTER? ? OR CLIPPER? ? OR SHAVER? ? OR RAZOR? ? OR (CLIP? - ??? OR CUTT??? OR SHAV??? OR TRIMM???) (3N) (TOOL? OR INSTRUMEN- T? OR IMPLEMENT?) |
| S2 | 1505261 | HAIR OR BEARD OR MUSTACH? OR SIDEBURN? OR SIDE()BURN? OR E- AR OR EARS OR NOSE? ? OR NECK? ? |
| S3 | 4101558 | ELECTRIC? OR POWERDRIVEN? OR POWER()DRIVEN OR MOTORDRIVEN - OR MOTOR()DRIVEN |
| S4 | 271900 | TRIMM??? OR TRIMMER? ? OR BEARDTRIM? OR MUSTACHETRIM? OR S- IDEBURNTRIM? OR SIDEBURNSTRIM? OR HAIRTRIM? |
| S5 | 1644582 | ATTACHMENT? ? OR ACCESSORY? OR ACCESSORIE? |
| S6 | 14161869 | AUXILIAR? OR SUPPLEMENTA? OR ADAPTER? ? OR ADDON? OR ADD()- (ON OR ONS) OR ADDITION?? |
| S7 | 3158402 | IMPROVER? ? OR IMPROVEMENT? ? OR APPURTENAN? |
| S8 | 2153 | REMOVABL?(2N) (ATTACH????? OR SECUR??? OR AFFIX????? OR FAS- TEN??? OR APPEND??? OR CONNECT??? OR ADJOIN????) OR DETACHBL? |
| S9 | 117009 | STATIONARY? OR (NON OR "NOT" OR UN) () (MOVING OR MOTILE OR - MOBILE) OR NONMOVING OR UNMOVING OR NOTMOVING OR NONMOTILE OR UNMOTILE OR NOTMOTILE OR UNMOBILE OR NONMOBILE OR NOTMOBILE |
| S10 | 3526682 | IMMOBILE OR IMMOTILE OR FIXED OR RIGID OR STEADY |
| S11 | 5108404 | RECIPROCATING OR MOVING OR MOTILE OR MOBILE OR IN()MOTION - OR BACK???? (2W) (FORTH OR FORWARD) OR MOVABLE OR MOVEABLE |
| S12 | 0 | "TO" (2W) FRO |
| S13 | 25751 | DETACHABL? |
| S14 | 3980 | S3(5N)S1 AND S2 |
| S15 | 33 | S14 AND S4(5N)S5:S7 |
| S16 | 58 | S14 AND S4(10N)S5:S7 |
| S17 | 17 | S15:S16 AND S8:S13 |
| S18 | 58 | S15:S17 |
| S19 | 51 | S18 AND PY<2002 |
| S20 | 28 | RD (unique items) |

? show files

File 9:Business & Industry(R) Jul/1994-2004/Jan 21
(c) 2004 Resp. DB Svcs.

File 16:Gale Group PROMT(R) 1990-2004/Jan 22
(c) 2004 The Gale Group

File 47:Gale Group Magazine DB(TM) 1959-2004/Jan 22
(c) 2004 The Gale group

File 80:TGG Aerospace/Def.Mkts(R) 1986-2004/Jan 22
(c) 2004 The Gale Group

File 141:Readers Guide 1983-2004/Dec
(c) 2004 The HW Wilson Co

File 148:Gale Group Trade & Industry DB 1976-2004/Jan 22
(c)2004 The Gale Group

File 160:Gale Group PROMT(R) 1972-1989
(c) 1999 The Gale Group

File 482:Newsweek 2000-2004/Jan 22
(c) 2004 Newsweek, Inc.

File 621:Gale Group New Prod.Annou.(R) 1985-2004/Jan 22
(c) 2004 The Gale Group

File 484:Periodical Abs Plustext 1986-2004/Jan W3
(c) 2004 ProQuest

File 635:Business Dateline(R) 1985-2004/Jan 23
(c) 2004 ProQuest Info&Learning

File 636:Gale Group Newsletter DB(TM) 1987-2004/Jan 22
(c) 2004 The Gale Group

File 646:Consumer Reports 1982-2004/Jan
(c) 2004 Consumer Union

File 609:Bridge World Markets 2000-2001/Oct 01
(c) 2001 Bridge

File 649:Gale Group Newswire ASAP(TM) 2004/Jan 13

(c) 2004 The Gale Group
File 610:Business Wire 1999-2004/Jan 23
(c) 2004 Business Wire.
File 613:PR Newswire 1999-2004/Jan 23
(c) 2004 PR Newswire Association Inc
File 809:Bridge World Markets News 1989-1999/Dec 31
(c) 1999 Bridge
File 810:Business Wire 1986-1999/Feb 28
(c) 1999 Business Wire
File 813:PR Newswire 1987-1999/Apr 30
(c) 1999 PR Newswire Association Inc
File 20:Dialog Global Reporter 1997-2004/Jan 23
(c) 2004 The Dialog Corp.
File 570:Gale Group MARS(R) 1984-2004/Jan 22
(c) 2004 The Gale Group

20/5,K/6 (Item 4 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2004 The Gale Group. All rts. reserv.

04771227 Supplier Number: 47023205 (USE FORMAT 7 FOR FULLTEXT)
Braun to Introduce New Products at 100th International Housewares Show
PR Newswire, p0108NEW025
Jan 8, 1997
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 420
PUBLISHER NAME: PR Newswire Association, Inc.
COMPANY NAMES: *Braun Inc.
EVENT NAMES: *330 (Product information)
GEOGRAPHIC NAMES: *1USA (United States)
PRODUCT NAMES: 3634213 (Men's **Electric Shavers**)
INDUSTRY NAMES: BUS (Business, General); BUSN (Any type of business)
NAICS CODES: 335211 (Electric Housewares and Household Fan Manufacturing)
TRADE NAMES: Shave & Shape
SPECIAL FEATURES: COMPANY
ADVERTISING CODES: 52 Advertising Activity; 57 New Products/Services

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

WOBURN, Mass., Jan. 8 /PRNewswire/ -- Braun Inc., a world leader in **electric foil shavers** introduces its latest in a long line of shaving innovations, Shave & Shape -- Braun's first...

Shave & Shape employs a unique cutting system that allows facial **hair** to be **trimmed**, styled and, of course, closely shaved. A three-setting **hair attachment** easily snaps to Braun's technologically advanced platinum-coated foil with a stainless steel cutterblock. The **hair** attachment allows various **beard** styles to be achieved by a adjusting the height of the **beard** length selector. This is Braun's first product to combine a cordless shaver with a **beard** trimmer.

For more than 70 years, Braun has created shavers that are defined by cutting...

...found price-point levels where our lines were not represented," explains Ian Crichton, shaving and **hair** care marketing manager of Braun Inc. "We believe that Shave & Shape helps fill a need...

...s shaving, specifically among younger men, so many of whom are choosing to wear facial **hair**."

Shave & Shape will be introduced at the 100th anniversary International Housewares Show, January 12 to...

...NYSE: G), has expanded beyond the traditional product areas such as household appliances, shavers and **hair** care. Since 1991, Braun has partnered with another Gillette subsidiary, Oral-B Laboratories, to become ...

...care products. In 1995, Gillette acquired ThermoScan(R), the world's leading manufacturer of instant **ear** thermometers. Now under Braun management, ThermoScan has strengthened the company's presence in the personal...

...of The Gillette Company since 1967, manufactures a variety of high-quality, European-designed products -- **electric shavers**, home diagnostic appliances, household, oral care and **hair** care products -- which are distributed throughout the world. Braun Inc., an affiliate of

Braun AG...

PRODUCT NAMES: 3634213 (Men's Electric Shavers)

19970108

20/5,K/23 (Item 8 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2004 The Gale Group. All rts. reserv.

02321007 SUPPLIER NUMBER: 03636546 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Wahl Clipper's adaptability leads to sales gains.

Class, Kelly

Housewares, v196, p20(2)

Feb 7, 1985

ISSN: 0162-8836 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT

WORD COUNT: 811 LINE COUNT: 00061

CAPTIONS: Jack Wahl. (portrait)

SPECIAL FEATURES: illustration; portrait

COMPANY NAMES: Wahl Clipper Corp.--Management

INDUSTRY CODES/NAMES: HOME Home Furnishings

DESCRIPTORS: Personal care appliances--Business and industry

NAMED PERSONS: Wahl, Jack--Management

SIC CODES: 3999. Manufacturing industries, not elsewhere classified

FILE SEGMENT: TI File 148

Already the world's largest manufacturer of professional **electric hair clippers**, Wahl Clipper has made solid in-roads into the consumer market with a personal grooming and home health care product lineup that includes home models of the firm's famous **hair** clippers, Swedish-style and hand-held massagers, back massagers, massaging body brushes and facial **hair** trimmers.

"We are a professional personal grooming manufacturer within a consumer market," observed company President Jack Wahl. "We are No. 1 in professional **hair** cutting tools and some of our better consumer products, such as our massagers and **hair** clippers, are items that were first offered to the professional market."

Founded in 1919 by...

...the advantages we have is that we follow and are aware of the changes in **hair** styles that are happening in the professional **hair** care market. We feel that really gives us an edge."

The executive said Wahl Clipper...

...development of a consumer product and its marketing direction.

He points to the company's **electric hair clipper** and trimmer line as an example. Staples of Wahl Clipper's consumer market product assortment, the items have come into their own in recent years with the emphasis on shorter **hair** styles for both men and women.

"**Hair** styles have gotten shorter again, there's no question about that," Wahl said. "Clippers cuts..."

...women's salons and both women and men are seeing the need to trim their **hair** slightly more often because of the tapered, shorter haircuts."

Wahl said products such as **hair** clippers and trimmers can lengthen the mileage a consumer gets out of a haircut, making the need for visits to the barber of **hair** salon less frequent.

Trimmers such as Wahl's Twix II, spotlighted at October's NHMA Show, can accomplish the same end according to Wahl. Designed to smooth and shape **hair**, the unit does not alter the user's present hairstyle. Instead, the Twix II keeps it in shape between haircuts.

Wahl also points to the Groomsmen facial **hair** trimmer line as an example of a commercial product that found its way into the...

...sales potential for the product exceeds 40 million men with the primary

target bearded or **mustached** males between the ages of 25 and 34, college educated and an above-average income...

...Groomsman is males all the way up to age 60.

The first Groomsman cordless facial **hair** trimmer made its debut a year ago. Wahl Clipper expanded the line at the October...

...introducing the Groomsman II. Similar to the first model, the unit includes a five position **trimming** guide **attachment**.

Wahl said his firm is not limiting itself to developing products for the personal grooming...

...we recognize that we have to adapt. In the '40s, Wahl Clipper manufactured thousands of **hair** dryers a day but we recognized that we could not compete with what they're...

19850207

| Set | Items | Description |
|-----|-------|--|
| S1 | 12 | AU=(MCCAMBRIDGE J? OR MCCAMBRIDGE, J?) |
| S2 | 14 | AU=(MELTON S? OR MELTON, S?) |
| S3 | 8985 | TRIMMER? OR RAZOR? OR SHAVER? |
| S4 | 1691 | IC=B25F? |
| S5 | 8 | S1:S2 AND S3:S4 |

? show files

File 347:JAPIO Oct 1976-2003/Sep(Updated 040105)
(c) 2004 JPO & JAPIO

File 348:EUROPEAN PATENTS 1978-2004/Jan W03
(c) 2004 European Patent Office

5/3,K/1 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2004 European Patent Office. All rts. reserv.

01558275

Hair clipper with tethered trimmer attachment and on-board attachment storage

Haarschneidegerat mit integriertem Trimmer -Aufsatz

Tondeuse avec accessoire de coupe integre

PATENT ASSIGNEE:

Wahl Clipper Corporation, (706712), 2900 North Locust Street, Sterling
Illinois 61081-0578, (US), (Applicant designated States: all)

INVENTOR:

Melton, Scott , 533 Main Street, Erie, Illinois 61250, (US)

McCambridge, James , 511 East Mason Street, Polo, Illinois 61064, (US)

LEGAL REPRESENTATIVE:

Pontet, Bernard (56031), Pontet Allano & Associes s.e.l.a.r.l. 25 rue

Jean-Rostand Parc Club Orsay Universite, 91893 Orsay Cedex, (FR)

PATENT (CC, No, Kind, Date): EP 1295687 A1 030326 (Basic)

APPLICATION (CC, No, Date): EP 2002292296 020919;

PRIORITY (CC, No, Date): US 955802 010919

DESIGNATED STATES: DE; ES; FR; GB; NL

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: B26B-019/20; B26B-019/38

ABSTRACT WORD COUNT: 89

NOTE:

Figure number on first page: 2

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

| Available Text | Language | Update | Word Count |
|----------------|----------|--------|------------|
|----------------|----------|--------|------------|

| | | | |
|----------|-----------|--------|-----|
| CLAIMS A | (English) | 200313 | 323 |
|----------|-----------|--------|-----|

| | | | |
|--------|-----------|--------|------|
| SPEC A | (English) | 200313 | 1549 |
|--------|-----------|--------|------|

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|-------------------------------|------|
| Total word count - document A | 1872 |
|-------------------------------|------|

| | |
|-------------------------------|---|
| Total word count - document B | 0 |
|-------------------------------|---|

| | |
|------------------------------------|------|
| Total word count - documents A + B | 1872 |
|------------------------------------|------|

Hair clipper with tethered trimmer attachment and on-board attachment storage

Haarschneidegerat mit integriertem Trimmer -Aufsatz

INVENTOR:

Melton, Scott ...

...US)

McCambridge, James ...

...ABSTRACT 14). One of the blades (16) is stationary, and the other (18) reciprocates. A hair **trimmer** or other attachment (10) is tethered to the hair clipper (12) so that it can...

...SPECIFICATION INVENTION

This invention relates to hair clippers, and more particularly, to hair clippers having tethered **trimmer** attachments that can be stored in the hair clipper.

Conventional hair clippers are often sold...

...distance between the clipper blades and the head or face. An attachment that has hair **trimmer** blades will be described here.

When attachments are removed they can easily be misplaced. Thus...

...of the housing. One of the blades is stationary, and the other reciprocates. A hair **trimmer** or other attachment is tethered to the hair clipper so that it can be selectively...

...a recess.

A variety of attachments can be used. One such attachment is a hair **trimmer** attachment that has a stationary blade and a moving blade that cut hair when the...

...this manner, and the drive member in turn drives the moving blade of the hair **trimmer** attachment to cut hair.

The attachment also is attached to the hair clipper by a...

...which:

FIG. 1 is a perspective view of a hair clipper having an integral hair **trimmer** attachment made in accordance with this invention, shown with the attachment inside the clipper.

FIG. 2 is a perspective view of the hair clipper of Fig. 1, showing the hair **trimmer** attachment removed from the housing of the hair clipper.

FIG. 3 is another perspective view...

...is a perspective view of the hair clipper of Fig. 1, shown with the hair **trimmer** attachment secured to the stationary blade of the hair clipper.

FIG. 5 is a perspective...

...embodiment of the hair clipper of Fig. 1.

DETAILED DESCRIPTION

Fig. 1 shows a hair **trimmer** attachment 10, and a hair clipper 12 having a housing 14, a stationary blade 16...on the attachment 202 fits.

The many advantages of this invention are now apparent. Hair **trimmer** attachments are tethered to the hair clipper, so they are not lost. The attachments can...

...example and not as a limitation on the scope of the invention. While a hair **trimmer** attachment has been described, it is contemplated that other devices, such as massagers, ear and nose hair **trimmers** and the like, could be attached to the hair clipper and driven in a similar...

5/3,K/2 (Item 2 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

01558274

Attachment for hair clippers

Aufsatz fur Haarschneider

Accessoire pour une tondeuse a cheveux

PATENT ASSIGNEE:

Wahl Clipper Corporation, (706712), 2900 North Locust Street, Sterling Illinois 61081-0578, (US), (Applicant designated States: all)

INVENTOR:

McCambridge, James , 511 East Mason Street, Polo, Illinois 61064, (US)

Melton, Scott , 533 Main Street, Erie, Illinois 61250, (US)

LEGAL REPRESENTATIVE:

Pontet, Bernard (56034), Pontet Allano & Associates SELARL, 25, rue Jean-Rostand, Parc Club Orsay Universite, 91893 Orsay Cedex, (FR)

PATENT (CC, No, Kind, Date): EP 1295686 A1 030326 (Basic)
APPLICATION (CC, No, Date): EP 2002292295 020919;
PRIORITY (CC, No, Date): US 955690 010919
DESIGNATED STATES: DE; GB
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: B26B-019/20; B26B-019/38
ABSTRACT WORD COUNT: 157

NOTE:

Figure number on first page: 2

LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:

| Available Text | Language | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS A | (English) | 200313 | 310 |
| SPEC A | (English) | 200313 | 1591 |
| Total word count - document A | | | 1901 |
| Total word count - document B | | | 0 |
| Total word count - documents A + B | | | 1901 |

INVENTOR:

McCambridge, James ...

...US)

Melton, Scott ...

...ABSTRACT A1

A hair **trimmer** or other attachment (10) can be secured to a conventional hair clipper (12). The attachment...

...and the drive member (124) in turn drives the moving blade (130) of the hair **trimmer** attachment (10) to cut hair. The attachment (10) can be easily detached so that the...

...SPECIFICATION blade of the hair clipper.

Hair clippers are well known, as are beard and sideburn **trimmers**, ears/nose **trimmers** and the like. Hair clippers typically have wide, relatively thick blades which are good for...

...for trimming sideburns, mustaches, beards, around the ears, the back of the neck, etc. Beard **trimmers**, on the other hand, have relatively narrow blades with less depth than hair clipper blades, to cut such hair. Ear and nose hair **trimmers** have even smaller blades.

Purchasing separate complete tools for hair, beards, etc. is expensive, and...

...and improved attachments for hair clippers.

Another object is to provide new and improved hair **trimmer** attachments for hair clippers that reduce the number of separate, complete tools needed for overall personal grooming.

Still another object is to provide new and improved hair **trimmer** attachments for hair clippers that reduce the amount of storage space required for personal grooming tools.

SUMMARY OF THE INVENTION

In keeping with one aspect of this invention, a hair **trimmer** or other attachment can be secured over the blades of a conventional hair clipper. The...

...hair clipper, and the drive member in turn drives the moving blade of the hair **trimmer** attachment to cut hair. The attachment can be easily

21
detached so that the hair clipper...

...with the accompanying drawings, in which:

FIG. 1 is a perspective view of a hair **trimmer** attachment made in accordance with this invention, attached to a hair clipper.

FIG. 2 is...

...view of the attachment of Fig. 1, partially assembled.

DETAILED DESCRIPTION

Fig. 1 shows a **trimmer** attachment 10 secured to a hair clipper 12, and Fig. 2 shows the **trimmer** attachment 10 removed from the hair clipper 12. The hair clipper 12 includes a housing...

...Moreover, the overlap or blade set-back of the moving and stationary teeth of the **trimmer** attachment is less than the set-back of the hair clipper moving and stationary blade...around the ears, the back of the neck, etc., can be trimmed with the hair **trimmer** attachment, without buying separate complete tools. The **trimmer** attachment can be made to be used with most conventional hair clippers. The amount of...

...the attachment surrounds the blades of the hair clipper, which are typically larger than the **trimmer** attachment blades, to avoid inadvertently cutting hair with the hair clippers.

While the principles of...

...example and not as a limitation on the scope of the invention. While a hair **trimmer** attachment has been described, it is contemplated that other devices such as massagers, ear and nose hair **trimmers** and the like, could be attached to the hair clipper and driven in a similar...

...CLAIMS A1

1. A **trimmer** attachment (10) for a hair clipper (12), the hair clipper (12) having a stationary blade...

...means (144) for securing the attachment (10) to the hair clipper (12);
and

a movable **trimmer** blade (130) operable in response to movement of the reciprocating blade (118) of the hair clipper (12).

2. The **trimmer** attachment (10) of claim 1, comprising:

a drive arm (124) at least partially surrounding the...

...guide (126) operatively connected to the drive arm (124) and also secured to the movable **trimmer** blade (130).

3. The **trimmer** attachment (10) of claim 2, comprising:

a stationary **trimmer** blade (132) that complements the movable **trimmer** blade (130), the movable **trimmer** blade (130) reciprocating across the stationary **trimmer** blade (132) to cut hair.

4. The **trimmer** attachment (10) of claim 3, comprising:

a base (122), the stationary **trimmer** blade (32) being secured in the base (122),

a spring (128) secured to the base...

...over the drive arm (124), to hold the drive arm (124) in place.

5. The **trimmer** attachment of claim 4 wherein the guide (134) also secures the attachment (10) to the hair clipper (12).

6. The **trimmer** attachment (10) of claim 4 or 5 wherein the base (122) covers the stationary blade...

...the hair clipper (12) to avoid unintentional cutting by the hair clipper (12) when the **trimmer** attachment (10) is secured to the hair

- clipper (12).
7. The **trimmer** attachment (10) of anyone of claims 4-6 wherein the base (122) has two sides (140, 142) that secure the attachment (10) laterally.
 8. The **trimmer** attachment (10) of anyone of claims 1-7, wherein hair clipper blades (16, 18) have a first width and the movable **trimmer** blade (130) has a second width narrower than the first width.

5/3,K/3 (Item 3 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2004 European Patent Office. All rts. reserv.

01435907

Hair clipping device with rotating bladeset having multiple cutting edges
Haarschneidegerat mit rotierenden Klingensatz mit mehrfachen Schneidkanten
Appareil de coupe de cheveux avec ensemble rotatif de lames ayant des
aretes de coupe multiples

PATENT ASSIGNEE:

Wahl Clipper Corporation, (706712), 2900 North Locust Street, Sterling
Illinois 61081-0578, (US), (Applicant designated States: all)

INVENTOR:

McCambridge, James Edward , 511 East Mason Street, Polo, Illinois 61064,
(US)

Freas, Jon Thomas, 1408 Bennett Drive, Rock Falls, Illinois 61071, (US)

Long, Jason M., 406 Hall Street, Morrison, Illinois 61270, (US)

Francovich, Walter, 17240 Antoine Faucon, Pierrefonds, QC H9J 3S8, (CA

LEGAL REPRESENTATIVE:

Pontet, Bernard (56031), Pontet Allano & Associes s.e.l.a.r.l. 25 rue

Jean-Rostand Parc Club Orsay Universite, 91893 Orsay Cedex, (FR)

PATENT (CC, No, Kind, Date): EP 1216799 A2 020626 (Basic)

EP 1216799 A3 030319

APPLICATION (CC, No, Date): EP 2001403239 011213;

PRIORITY (CC, No, Date): US 736800 001214

DESIGNATED STATES: DE; ES; FR; GB; IT; NL

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: B26B-019/06; B26B-019/44

ABSTRACT WORD COUNT: 157

NOTE:

Figure number on first page: 2

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

| Available Text | Language | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS A | (English) | 200226 | 904 |
| SPEC A | (English) | 200226 | 7057 |
| Total word count - document A | | | 7961 |
| Total word count - document B | | | 0 |
| Total word count - documents A + B | | | 7961 |

INVENTOR:

McCambridge, James Edward ...

...SPECIFICATION or other light duty general hair trimming. Whether the
trimming is accomplished with a powered **trimmer** or clippers, or with an
ordinary scissors, the typically relatively short hair clippings have the
...

...has been found that the resulting mess from such trimming is worse when
an electric **trimmer** is used, since the reciprocating blades have the

tendency to throw the clippings over a...

...trimmings is commonly-assigned U.S. Patent No. 5,075,971, which discloses a cordless **trimmer** for delicate hairs such as those growing in or around the nose, ears and/or...

...as is used for performing the "gross" trimming. In response, some conventional electric clippers or **shavers** offer auxiliary pop-up trimming blades which are supplemental to the main cutting blades. However...10. It is contemplated that, while the clipper shown is generally referred to as a **trimmer**, the features and principles of the invention may be applied to other conventional types of...

5/3,K/4 (Item 4 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2004 European Patent Office. All rts. reserv.

01435906

Hair clipping device with internal vacuum

Haarschneidegerat mit innerem Vakuum

Appareil de coupe de cheveux avec vide interne

PATENT ASSIGNEE:

Wahl Clipper Corporation, (706712), 2900 North Locust Street, Sterling
Illinois 61081-0578, (US), (Applicant designated States: all)

INVENTOR:

McCambridge, James Edward, 511 East Mason Street, Polo, Illinois 61064,
(US)

Freas, Jon Thomas, 1408 Bennett Drive, Rock Falls, Illinois 61071, (US)

Long, Jason M., 406 Hall Street, Morrison, Illinois 61270, (US)

Francovich, Walter, 17240 Antoine Faucon, Pierrefonds, QC H9J 3S8, (CA
LEGAL REPRESENTATIVE:

Pontet, Bernard (56032), Pontet Allano & Associates S.E.L.A.R.L. 25, rue
Jean-Rostand Parc Club Orsay Universite, 91893 Orsay Cedex, (FR)

PATENT (CC, No, Kind, Date): EP 1216800 A2 020626 (Basic)

EP 1216800 A3 030319

APPLICATION (CC, No, Date): EP 2001403237 011213;

PRIORITY (CC, No, Date): US 737095 001214

DESIGNATED STATES: DE; ES; FR; GB; IT; NL

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: B26B-019/44; B26B-019/06

ABSTRACT WORD COUNT: 175

NOTE:

Figure number on first page: 2

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

| Available Text | Language | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS A | (English) | 200226 | 1036 |
| SPEC A | (English) | 200226 | 7040 |
| Total word count - document A | | | 8076 |
| Total word count - document B | | | 0 |
| Total word count - documents A + B | | | 8076 |

INVENTOR:

McCambridge, James Edward ...

...SPECIFICATION or other light duty general hair trimming. Whether the trimming is accomplished with a powered **trimmer** or clippers, or with an ordinary scissors, the typically relatively short hair clippings have the

...
...has been found that the resulting mess from such trimming is worse when an electric **trimmer** is used, since the reciprocating blades have the tendency to throw the clippings over a...

...trimmings is commonly-assigned U.S. Patent No. 5,075,971, which discloses a cordless **trimmer** for delicate hairs such as those growing in or around the nose, ears and/or...

...as is used for performing the "gross" trimming. In response, some conventional electric clippers or **shavers** offer pop-up trimming blades which are supplemental to the main cutting blades. However, these...

...blades, causing the user to make inadvertent cuts with the main blades while using the **trimmer**. Further, the close proximity of the main and **trimmer** blades in some cases obscures the area to be trimmed.

An important design factor for...10. It is contemplated that, while the clipper shown is generally referred to as a **trimmer**, the features and principles of the invention may be applied to other conventional types of

5/3,K/5 (Item 5 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2004 European Patent Office. All rts. reserv.

01434738

Hair clipping device with adjustable deflecting comb assembly

Haarschneidegerat mit verstellbarer Ablenkkammbaugruppe

Tondeuse avec assemblage de peigne deviant réglable

PATENT ASSIGNEE:

Wahl Clipper Corporation, (706710), 2900 Locust Street P.O. Box 578,
Sterling Illinois 61081, (US), (Applicant designated States: all)

INVENTOR:

Mccambridge, James Edward, 511 East Mason Street, Polo, Illinois 61064,
(US)

Freas, Jon Thomas, 1408 Bennett Drive, Rock Falls, Illinois 61071, (US)

Long, Jason M., 406 Hall Street, Morrisson, Illinois 61270, (US)

Francovich, Walter, 17240 AntoineFaucon, Pierrefonds, QC H9J 3S8, (CA)

LEGAL REPRESENTATIVE:

Pontet, Bernard (56031), Pontet Allano & Associates s.e.l.a.r.l. 25 rue

Jean-Rostand Parc Club Orsay Universite, 91893 Orsay Cedex, (FR)

PATENT (CC, No, Kind, Date): EP 1215020 A2 020619 (Basic)

EP 1215020 A3 020904

APPLICATION (CC, No, Date): EP 2001403238 011213;

PRIORITY (CC, No, Date): US 737101 001214

DESIGNATED STATES: DE; ES; FR; GB; IT; NL

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: B26B-019/20; B26B-019/44

ABSTRACT WORD COUNT: 153

NOTE:

Figure number on first page: 2

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

| Available Text | Language | Update | Word Count |
|----------------|----------|--------|------------|
|----------------|----------|--------|------------|

| | | | |
|----------|-----------|--------|-----|
| CLAIMS A | (English) | 200225 | 888 |
|----------|-----------|--------|-----|

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|--------|-----------|--------|------|
| SPEC A | (English) | 200225 | 6779 |
|--------|-----------|--------|------|

| | | | |
|-------------------------------|--|--|------|
| Total word count - document A | | | 7667 |
|-------------------------------|--|--|------|

Total word count - document B 0
Total word count - documents A + B 7667

INVENTOR:

Mccambridge, James Edward ...

...SPECIFICATION or other light duty general hair trimming. Whether the trimming is accomplished with a powered **trimmer** or clippers, or with an ordinary scissors, the typically relatively short hair clippings have the ...

...has been found that the resulting mess from such trimming is worse when an electric **trimmer** is used, since the reciprocating blades have the tendency to throw the clippings over a...

...trimmings is commonly-assigned U.S. Patent No. 5,075,971, which discloses a cordless **trimmer** for delicate hairs such as those growing in or around the nose, ears and/or...10. It is contemplated that, while the clipper shown is generally referred to as a **trimmer**, the features and principles of the invention may be applied to other conventional types of...

5/3,K/6 (Item 6 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2004 European Patent Office. All rts. reserv.

01052249

An ajustable attachment comb and a hair-trimming apparatus equipped therewith

Einstellbarer Befestigungskamm und damit ausgerustetes Haarschneidegerat
Peigne réglable de fixation ainsi que tondeuse equipee d'un tel peigne

PATENT ASSIGNEE:

Wahl Clipper Corporation, (706712), 2900 North Locust Street, Sterling
Illinois 61081-0578, (US), (applicant designated states:
AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)

INVENTOR:

Melton, Scott, 533 Main Street, Erie, Illinois 61250, (US)
Freas, Jon Thomas, 1408 Bennett Drive, Rock Fall, Illinois 61071, (US)
LEGAL REPRESENTATIVE:

Pontet, Bernard (56034), Pontet Allano & Associes SELARL, 25, rue
Jean-Rostand, Parc Club Orsay Universite, 91893 Orsay Cedex, (FR)

PATENT (CC, No, Kind, Date): EP 928670 A1 990714 (Basic)

APPLICATION (CC, No, Date): EP 99400030 990108;

PRIORITY (CC, No, Date): US 5322 980109

DESIGNATED STATES: DE; FR; GB; IT; NL

INTERNATIONAL PATENT CLASS: B26B-019/20;

ABSTRACT WORD COUNT: 231

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

| Available Text | Language | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS A | (English) | 9928 | 1253 |
| SPEC A | (English) | 9928 | 5207 |
| Total word count - document A | | | 6460 |
| Total word count - document B | | | 0 |
| Total word count - documents A + B | | | 6460 |

INVENTOR:

Melton, Scott ...

...SPECIFICATION combs are available for use with hair cutting devices (such as hair clippers or hair trimmers). Generally, when an attachment comb is used, it is affixed to one end of the...

5/3,K/7 (Item 7 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2004 European Patent Office. All rts. reserv.

01047491

Attachment comb for hair clipper

Kamm zum Befestigen an einem Haarschneidegerat

Peigne pour attacher a une tondeuse

PATENT ASSIGNEE:

Wahl Clipper Corporation, (706712), 2900 North Locust Street, Sterling
Illinois 61081-0578, (US), (Proprietor designated states: all)

INVENTOR:

Wahl, Gregory, 27131 R Street, Sterling, Illinois 61081, (US)

Brill, Edward, 603 5th Avenue, Sterling, Illinois 61081, (US)

Melton, Scott , 533 Main Street, Erle, Illinois 61250, (US)

LEGAL REPRESENTATIVE:

Pontet, Bernard (56034), Pontet Allano & Associes SELARL, 25, rue
Jean-Rostand, Parc Club Orsay Universite, 91893 Orsay Cedex, (FR)

PATENT (CC, No, Kind, Date): EP 925885 A1 990630 (Basic)

EP 925885 B1 020717

APPLICATION (CC, No, Date): EP 98403269 981222;

PRIORITY (CC, No, Date): US 996439 971222

DESIGNATED STATES: AT; DE; FR; GB; IT; NL

INTERNATIONAL PATENT CLASS: B26B-019/20

ABSTRACT WORD COUNT: 171

NOTE:

Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

| Available Text | Language | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS A | (English) | 199926 | 865 |
| CLAIMS B | (English) | 200229 | 789 |
| CLAIMS B | (German) | 200229 | 733 |
| CLAIMS B | (French) | 200229 | 809 |
| SPEC A | (English) | 199926 | 4581 |
| SPEC B | (English) | 200229 | 4765 |
| Total word count - document A | | | 5447 |
| Total word count - document B | | | 7096 |
| Total word count - documents A + B | | | 12543 |

INVENTOR:

... US)

Melton, Scott ...

...SPECIFICATION via the base portion 12. Once the attachment comb 10 is in place, the hair trimmer is turned on, and the hair trimmer , with attachment comb 10 in place, is guided over the head of the subject about ...

...using long strokes, lines of hair are trimmed as the teeth 14 guide the hair trimmer over the subject's head. Because of the double curved configuration (including the concave curved...

...the widened ribs 40, the hair in a line below the path of the hair trimmer is cut to a uniform length with little or no discomfort. At the opposite hairline...

...SPECIFICATION via the base portion 12. Once the attachment comb 10 is in place, the hair trimmer is turned on, and the hair trimmer, with attachment comb 10 in place, is guided over the head of the subject about ...

...using long strokes, lines of hair are trimmed as the teeth 14 guide the hair trimmer over the subject's head. Because of the double curved configuration (including the concave curved...

...the widened ribs 40, the hair in a line below the path of the hair trimmer is cut to a uniform length with little or no discomfort. At the opposite hairline...

5/3,K/8 (Item 8 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2004 European Patent Office. All rts. reserv.

00752633

A hair clipper, and a disposable blade assembly relating thereto

Haarschneider mit Wegwerfklingeneinheit

Coupe cheveux a unite de lames jetable

PATENT ASSIGNEE:

Wahl Clipper Corporation, (706712), 2900 North Locust Street, Sterling
Illinois 61081-0578, (US), (Proprietor designated states: all)

INVENTOR:

Melton, Scott, 533 Main Street, Erie, Illinois 61250, (US

LEGAL REPRESENTATIVE:

Pontet, Bernard (56033), Pontet Allano & Associates s.e.l.a.r.l. 25, rue
Jean-Rostand Parc Club Orsay Universite, 91893 Orsay Cedex, (FR)

PATENT (CC, No, Kind, Date): EP 707926 A1 960424 (Basic)

EP 707926 B1 020612

APPLICATION (CC, No, Date): EP 95402316 951017;

PRIORITY (CC, No, Date): US 327436 941021

DESIGNATED STATES: AT; DE; FR; GB; IT; NL

INTERNATIONAL PATENT CLASS: B26B-019/06; B26B-019/38

ABSTRACT WORD COUNT: 84

NOTE:

Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

| Available Text | Language | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS A | (English) | EPAB96 | 634 |
| CLAIMS B | (English) | 200224 | 655 |
| CLAIMS B | (German) | 200224 | 611 |
| CLAIMS B | (French) | 200224 | 776 |
| SPEC A | (English) | EPAB96 | 4222 |
| SPEC B | (English) | 200224 | 4469 |
| Total word count - document A | | | 4857 |
| Total word count - document B | | | 6511 |
| Total word count - documents A + B | | | 11368 |

INVENTOR:

Melton, Scott ...

...SPECIFICATION A1

The present invention relates to electric hair clippers, **trimmers** and **shavers**, and specifically to such devices having blade assemblies which are pivotable and/or rotatable, and...

...there are two tools used to clip patients' hair prior to surgery: the disposable manual **razor**, and the electric clipper. Aside from its total disposability, which is a sanitary advantage, a major advantage of the manual **razor** is that it provides a stubble-free surface preferred by many physicians. However, clinical studies have shown that nicks caused by pre-operative shaving with **razors** may contribute to post-operative infections. Thus, many physicians are now recommending that such shaving...

...SPECIFICATION B1

The present invention relates to electric hair clippers, **trimmers** and **shavers**, and specifically to such devices having blade assemblies which are pivotable and/or rotatable, and...

...there are two tools used to clip patients' hair prior to surgery: the disposable manual **razor**, and the electric clipper. Aside from its total disposability, which is a sanitary advantage, a major advantage of the manual **razor** is that it provides a stubble-free surface preferred by many physicians. However, clinical studies have shown that nicks caused by pre-operative shaving with **razors** may contribute to post-operative infections. Thus, many physicians are now recommending that such shaving...

| Set | Items | Description |
|-----|-------|--|
| S1 | 9 | AU=(MCCAMBRIDGE J? OR MCCAMBRIDGE, J?) |
| S2 | 14 | AU=(MELTON S? OR MELTON, S?) |
| S3 | 7974 | TRIMMER? OR RAZOR? OR SHAVER? |
| S4 | 853 | IC=B25F? |
| S5 | 8 | S1:S2 AND S3:S4 |

? show files

File 348:EUROPEAN PATENTS 1978-2004/Jan W03

(c) 2004 European Patent Office

File 349:PCT FULLTEXT 1979-2002/UB=20040122,UT=20040115

(c) 2004 WIPO/Univentio

5/3,AU/1 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2004 European Patent Office. All rts. reserv.

01558275

Hair clipper with tethered trimmer attachment and on-board attachment storage

Haarschneidegerät mit integriertem Trimmer -Aufsatz

Tondeuse avec accessoire de coupe integre

PATENT ASSIGNEE:

Wahl Clipper Corporation, (706712), 2900 North Locust Street, Sterling
Illinois 61081-0578, (US), (Applicant designated States: all)

INVENTOR:

Melton, Scott , 533 Main Street, Erie, Illinois 61250, (US)

McCambridge, James , 511 East Mason Street, Polo, Illinois 61064, (US)

LEGAL REPRESENTATIVE:

Pontet, Bernard (56031), Pontet Allano & Associes s.e.l.a.r.l. 25 rue
Jean-Rostand Parc Club Orsay Universite, 91893 Orsay Cedex, (FR)

PATENT (CC, No, Kind, Date): EP 1295687 A1 030326 (Basic)

APPLICATION (CC, No, Date): EP 2002292296 020919;

PRIORITY (CC, No, Date): US 955802 010919

DESIGNATED STATES: DE; ES; FR; GB; NL

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: B26B-019/20; B26B-019/38

ABSTRACT WORD COUNT: 89

NOTE:

Figure number on first page: 2

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

| Available Text | Language | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS A | (English) | 200313 | 323 |
| SPEC A | (English) | 200313 | 1549 |
| Total word count - document A | | | 1872 |
| Total word count - document B | | | 0 |
| Total word count - documents A + B | | | 1872 |

5/3,AU/2 (Item 2 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2004 European Patent Office. All rts. reserv.

01558274

Attachment for hair clippers

Aufsatz fur Haarschneider

Accessoire pour une tondeuse a cheveux

PATENT ASSIGNEE:

Wahl Clipper Corporation, (706712), 2900 North Locust Street, Sterling
Illinois 61081-0578, (US), (Applicant designated States: all)

INVENTOR:

McCambridge, James , 511 East Mason Street, Polo, Illinois 61064, (US)

Melton, Scott , 533 Main Street, Erie, Illinois 61250, (US)

LEGAL REPRESENTATIVE:

Pontet, Bernard (56034), Pontet Allano & Associes SELARL, 25, rue
Jean-Rostand, Parc Club Orsay Universite, 91893 Orsay Cedex, (FR)

PATENT (CC, No, Kind, Date): EP 1295686 A1 030326 (Basic)

APPLICATION (CC, No, Date): EP 2002292295 020919;

PRIORITY (CC, No, Date): US 955690 010919

DESIGNATED STATES: DE; GB

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: B26B-019/20; B26B-019/38

ABSTRACT WORD COUNT: 157

NOTE:

Figure number on first page: 2

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

| Available Text | Language | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS A | (English) | 200313 | 310 |
| SPEC A | (English) | 200313 | 1591 |
| Total word count - document A | | | 1901 |
| Total word count - document B | | | 0 |
| Total word count - documents A + B | | | 1901 |

5/3,AU/3 (Item 3 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

01435907

Hair clipping device with rotating bladeset having multiple cutting edges
Haarschneidegerat mit rotierenden Klingensatz mit mehrfachen Schneidkanten
Appareil de coupe de cheveux avec ensemble rotatif de lames ayant des
aretes de coupe multiples

PATENT ASSIGNEE:

Wahl Clipper Corporation, (706712), 2900 North Locust Street, Sterling
Illinois 61081-0578, (US), (Applicant designated States: all)

INVENTOR:

McCambridge, James Edward , 511 East Mason Street, Polo, Illinois 61064,
(US)

Freas, Jon Thomas, 1408 Bennett Drive, Rock Falls, Illinois 61071, (US)

Long, Jason M., 406 Hall Street, Morrison, Illinois 61270, (US)

Francovich, Walter, 17240 Antoine Faucon, Pierrefonds, QC H9J 3S8, (CA

LEGAL REPRESENTATIVE:

Pontet, Bernard (56031), Pontet Allano & Associes s.e.l.a.r.l. 25 rue

Jean-Rostand Parc Club Orsay Universite, 91893 Orsay Cedex, (FR)

PATENT (CC, No, Kind, Date): EP 1216799 A2 020626 (Basic)

EP 1216799 A3 030319

APPLICATION (CC, No, Date): EP 2001403239 011213;

PRIORITY (CC, No, Date): US 736800 001214

DESIGNATED STATES: DE; ES; FR; GB; IT; NL

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: B26B-019/06; B26B-019/44

ABSTRACT WORD COUNT: 157

NOTE:

Figure number on first page: 2

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

| Available Text | Language | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS A | (English) | 200226 | 904 |
| SPEC A | (English) | 200226 | 7057 |
| Total word count - document A | | | 7961 |
| Total word count - document B | | | 0 |
| Total word count - documents A + B | | | 7961 |

5/3,AU/4 (Item 4 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

01435906

Hair clipping device with internal vacuum

Haarschneidegerät mit innerem Vakuum

Appareil de coupe de cheveux avec vide interne

PATENT ASSIGNEE:

Wahl Clipper Corporation, (706712), 2900 North Locust Street, Sterling
Illinois 61081-0578, (US), (Applicant designated States: all)

INVENTOR:

McCambridge, James Edward , 511 East Mason Street, Polo, Illinois 61064,
(US)

Freas, Jon Thomas, 1408 Bennett Drive, Rock Falls, Illinois 61071, (US)

Long, Jason M., 406 Hall Street, Morrison, Illinois 61270, (US)

Francovich, Walter, 17240 Antoine Faucon, Pierrefonds, QC H9J 3S8, (CA

LEGAL REPRESENTATIVE:

Pontet, Bernard (56032), Pontet Allano & Associes S.E.L.A.R.L. 25, rue

Jean-Rostand Parc Club Orsay Universite, 91893 Orsay Cedex, (FR)

PATENT (CC, No, Kind, Date): EP 1216800 A2 020626 (Basic)

EP 1216800 A3 030319

APPLICATION (CC, No, Date): EP 2001403237 011213;

PRIORITY (CC, No, Date): US 737095 001214

DESIGNATED STATES: DE; ES; FR; GB; IT; NL

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: B26B-019/44; B26B-019/06

ABSTRACT WORD COUNT: 175

NOTE:

Figure number on first page: 2

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

| Available Text | Language | Update | Word Count |
|----------------|----------|--------|------------|
|----------------|----------|--------|------------|

| | | | |
|----------|-----------|--------|------|
| CLAIMS A | (English) | 200226 | 1036 |
|----------|-----------|--------|------|

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|--------|-----------|--------|------|
| SPEC A | (English) | 200226 | 7040 |
|--------|-----------|--------|------|

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|-------------------------------|------|
| Total word count - document A | 8076 |
|-------------------------------|------|

| | |
|-------------------------------|---|
| Total word count - document B | 0 |
|-------------------------------|---|

| | |
|------------------------------------|------|
| Total word count - documents A + B | 8076 |
|------------------------------------|------|

5/3,AU/5 (Item 5 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

01434738

Hair clipping device with adjustable deflecting comb assembly

Haarschneidegerät mit verstellbarer Ablenkkammbaugruppe

Tondeuse avec assemblage de peigne deviant réglable

PATENT ASSIGNEE:

Wahl Clipper Corporation, (706710), 2900 Locust Street P.O. Box 578,

Sterling Illinois 61081, (US), (Applicant designated States: all)

INVENTOR:

Mccambridge, James Edward , 511 East Mason Street, Polo, Illinois 61064,
(US)

Freas, Jon Thomas, 1408 Bennett Drive, Rock Falls, Illinois 61071, (US)

Long, Jason M., 406 Hall Street, Morrisson, Illinois 61270, (US)

Francovich, Walter, 17240 AntoineFaucon, Pierrefonds, QC H9J 3S8, (CA

LEGAL REPRESENTATIVE:

Pontet, Bernard (56031), Pontet Allano & Associes s.e.l.a.r.l. 25 rue

Jean-Rostand Parc Club Orsay Universite, 91893 Orsay Cedex, (FR)

PATENT (CC, No, Kind, Date): EP 1215020 A2 020619 (Basic)

EP 1215020 A3 020904

APPLICATION (CC, No, Date): EP 2001403238 011213;

PRIORITY (CC, No, Date): US 737101 001214

DESIGNATED STATES: DE; ES; FR; GB; IT; NL

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: B26B-019/20; B26B-019/44

ABSTRACT WORD COUNT: 153

NOTE:

Figure number on first page: 2

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

| Available Text | Language | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS A | (English) | 200225 | 888 |
| SPEC A | (English) | 200225 | 6779 |
| Total word count - document A | | | 7667 |
| Total word count - document B | | | 0 |
| Total word count - documents A + B | | | 7667 |

5/3,AU/6 (Item 6 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

01052249

An ajustable attachment comb and a hair-trimming apparatus equipped therewith

Einstellbarer Befestigungskamm und damit ausgerustetes Haarschneidegerat

Peigne réglable de fixation ainsi que tondeuse equipee d'un tel peigne

PATENT ASSIGNEE:

Wahl Clipper Corporation, (706712), 2900 North Locust Street, Sterling

Illinois 61081-0578, (US), (applicant designated states:

AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)

INVENTOR:

Melton, Scott , 533 Main Street, Erie, Illinois 61250, (US)

Freas, Jon Thomas, 1408 Bennett Drive, Rock Fall, Illinois 61071, (US

LEGAL REPRESENTATIVE:

Pontet, Bernard (56034), Pontet Allano & Associes SELARL, 25, rue

Jean-Rostand, Parc Club Orsay Universite, 91893 Orsay Cedex, (FR)

PATENT (CC, No, Kind, Date): EP 928670 A1 990714 (Basic)

APPLICATION (CC, No, Date): EP 99400030 990108;

PRIORITY (CC, No, Date): US 5322 980109

DESIGNATED STATES: DE; FR; GB; IT; NL

INTERNATIONAL PATENT CLASS: B26B-019/20;

ABSTRACT WORD COUNT: 231

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

| Available Text | Language | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS A | (English) | 9928 | 1253 |
| SPEC A | (English) | 9928 | 5207 |
| Total word count - document A | | | 6460 |
| Total word count - document B | | | 0 |
| Total word count - documents A + B | | | 6460 |

5/3,AU/7 (Item 7 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

01047491

Attachment comb for hair clipper

Kamm zum Befestigen an einem Haarschneidegerat

Peigne pour attacher a une tondeuse

PATENT ASSIGNEE:

Wahl Clipper Corporation, (706712), 2900 North Locust Street, Sterling

Illinois 61081-0578, (US), (Proprietor designated states: all)

INVENTOR:

Wahl, Gregory, 27131 R Street, Sterling, Illinois 61081, (US)
Brill, Edward, 603 5th Avenue, Sterling, Illinois 61081, (US)
Melton, Scott , 533 Main Street, Erle, Illinois 61250, (US)

LEGAL REPRESENTATIVE:

Pontet, Bernard (56034), Pontet Allano & Associes SELARL, 25, rue
Jean-Rostand, Parc Club Orsay Universite, 91893 Orsay Cedex, (FR)
PATENT (CC, No, Kind, Date): EP 925885 A1 990630 (Basic)
EP 925885 B1 020717

APPLICATION (CC, No, Date): EP 98403269 981222;

PRIORITY (CC, No, Date): US 996439 971222

DESIGNATED STATES: AT; DE; FR; GB; IT; NL

INTERNATIONAL PATENT CLASS: B26B-019/20

ABSTRACT WORD COUNT: 171

NOTE:

Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

| Available Text | Language | Update | Word Count |
|------------------------------------|-----------|--------|------------|
| CLAIMS A | (English) | 199926 | 865 |
| CLAIMS B | (English) | 200229 | 789 |
| CLAIMS B | (German) | 200229 | 733 |
| CLAIMS B | (French) | 200229 | 809 |
| SPEC A | (English) | 199926 | 4581 |
| SPEC B | (English) | 200229 | 4765 |
| Total word count - document A | | | 5447 |
| Total word count - document B | | | 7096 |
| Total word count - documents A + B | | | 12543 |

5/3,AU/8 (Item 8 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

00752633

A hair clipper, and a disposable blade assembly relating thereto

Haarschneider mit Wegwerfklingeneinheit

Coupe cheveux a unite de lames jetable

PATENT ASSIGNEE:

Wahl Clipper Corporation, (706712), 2900 North Locust Street, Sterling
Illinois 61081-0578, (US), (Proprietor designated states: all)

INVENTOR:

Melton, Scott , 533 Main Street, Erie, Illinois 61250, (US)

LEGAL REPRESENTATIVE:

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PATENT (CC, No, Kind, Date): EP 707926 A1 960424 (Basic)
EP 707926 B1 020612

APPLICATION (CC, No, Date): EP 95402316 951017;

PRIORITY (CC, No, Date): US 327436 941021

DESIGNATED STATES: AT; DE; FR; GB; IT; NL

INTERNATIONAL PATENT CLASS: B26B-019/06; B26B-019/38

ABSTRACT WORD COUNT: 84

NOTE:

Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

| Available Text | Language | Update | Word Count |
|----------------|-----------|--------|------------|
| CLAIMS A | (English) | EPAB96 | 634 |
| CLAIMS B | (English) | 200224 | 655 |
| CLAIMS B | (German) | 200224 | 611 |
| CLAIMS B | (French) | 200224 | 776 |

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| SPEC A | (English) | EPAB96 | 4222 |
| SPEC B | (English) | 200224 | 4469 |
| Total word count | - document A | | 4857 |
| Total word count | - document B | | 6511 |
| Total word count | - documents A + B | | 11368 |

| Set | Items | Description |
|-----|-------|--|
| S1 | 62 | AU=(MCCAMBRIDGE J? OR MCCAMBRIDGE, J?) |
| S2 | 127 | AU=(MELTON S? OR MELTON, S?) |
| S3 | 6798 | TRIMMER? OR RAZOR? OR SHAVER? |
| S4 | 0 | IC=B25F? |
| S5 | 0 | S1:S2 AND S3 |

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File 111:TGG Natl.Newspaper Index(SM) 1979-2004/Jan 22
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| S1 | 6 | AU=(MCCAMBRIDGE J? OR MCCAMBRIDGE, J?) |
| S2 | 10 | AU=(MELTON S? OR MELTON, S?) |
| S3 | 137678 | TRIMMER? OR RAZOR? OR SHAVER? |
| S4 | 2 | S1:S2 AND S3 |

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(c) 1999 PR Newswire Association Inc

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(c) 2004 The Dialog Corp.

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(c) 2004 The Gale Group

| L Number | Hits | Search Text | DB | Time stamp |
|----------|------|---|---|------------------|
| 9 | 25 | ((hair or beard or mustache or sideburn\$) with (clipper\$ or razor\$)) same ((attachment or accessory) with (trim or trims or trimmed or trimmer or trimmers)) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2004/01/23 08:55 |



(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
26.03.2003 Bulletin 2003/13

(51) Int Cl.7: **B26B 19/20, B26B 19/38**

(21) Application number: **02292296.7**

(22) Date of filing: **19.09.2002**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
IE IT LI LU MC NL PT SE SK TR
 Designated Extension States:
AL LT LV MK RO SI

(72) Inventors:
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 • **McCambridge, James**
Polo, Illinois 61064 (US)

(30) Priority: **19.09.2001 US 955802**

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(71) Applicant: **Wahl Clipper Corporation**
Sterling Illinois 61081-0578 (US)

(54) **Hair clipper with tethered trimmer attachment and on-board attachment storage**

(57) A hair clipper (12) has a housing (14) and a pair of blades (16,18) secured outside of the housing (14). One of the blades (16) is stationary, and the other (18) reciprocates. A hair trimmer or other attachment (10) is

tethered to the hair clipper (12) so that it can be selectively placed over the hair clipper blades (16,18) in use, but is not lost when removed from the blades (16,18). The attachment (10) is stored in a recess (21) in the housing (14) when not in use.

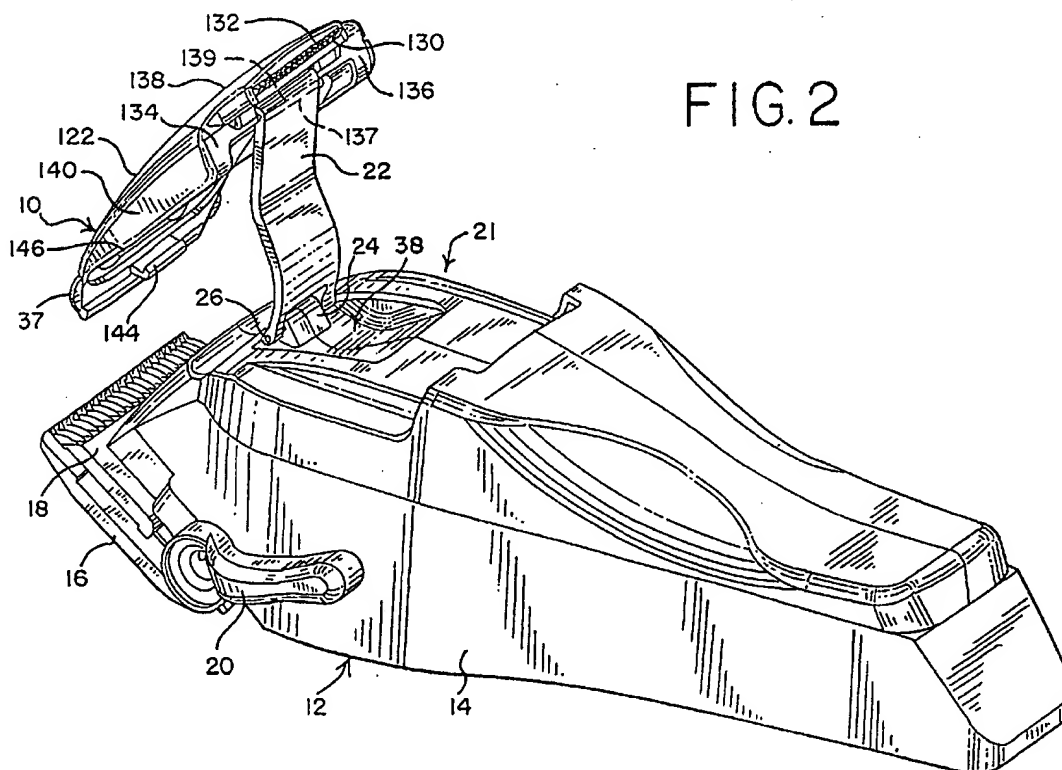


FIG. 2



(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
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(51) Int Cl.7: **B26B 19/20, B26B 19/38**

(21) Application number: **02292295.9**

(22) Date of filing: **19.09.2002**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
IE IT LI LU MC NL PT SE SK TR
 Designated Extension States:
AL LT LV MK RO SI

(72) Inventors:
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 • **Melton, Scott**
Erie, Illinois 61250 (US)

(30) Priority: **19.09.2001 US 955690**

(74) Representative: **Pontet, Bernard**
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(71) Applicant: **Wahl Clipper Corporation**
Sterling Illinois 61081-0578 (US)

(54) **Attachment for hair clippers**

(57) A hair trimmer or other attachment (10) can be secured to a conventional hair clipper (12). The attachment (10) has a stationary blade (132) and a moving blade (130) that cut hair when the moving blade (130) reciprocates. The moving blade (130) of the attachment (10) is driven by a moving blade (18) of the hair clipper (12), which also reciprocates. The attachment (10) has a housing (122) which secures the attachment (10) to

the stationary blade (16) or other part of the hair clipper (12). A drive member (124) engages the moving blade (18) of the hair clipper (12) when the attachment (10) is secured to the hair clipper (12), and the drive member (124) in turn drives the moving blade (130) of the hair trimmer attachment (10) to cut hair. The attachment (10) can be easily detached so that the hair clipper blades (16,18) can be used to cut hair in the usual manner.

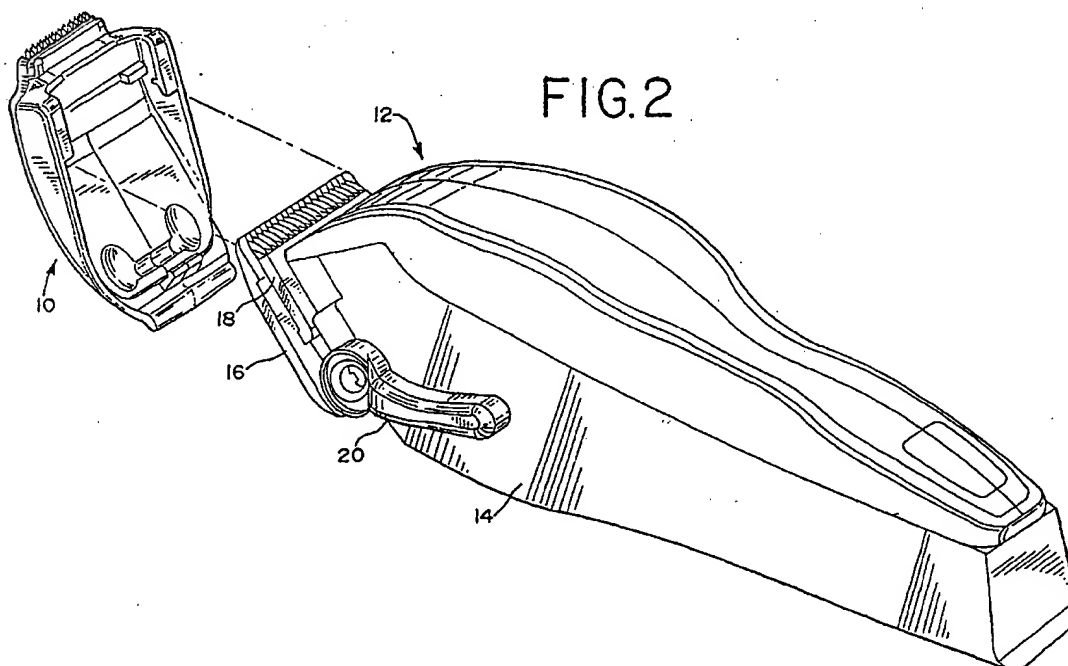
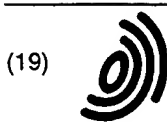


FIG.2



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11)

EP 0 925 885 A1

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:
30.06.1999 Bulletin 1999/26

(51) Int Cl.⁶: B26B 19/20

(21) Application number: 98403269.8

(22) Date of filing: 22.12.1998

(84) Designated Contracting States:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE
Designated Extension States:
AL LT LV MK RO SI

• Brill, Edward
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• Melton, Scott
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(30) Priority: 22.12.1997 US 996439

(71) Applicant: Wahl Clipper Corporation
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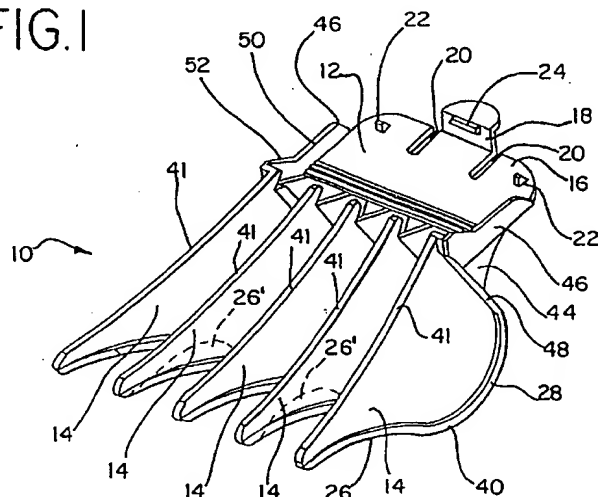
(72) Inventors:
• Wahl, Gregory
Sterling, Illinois 61081 (US)

(54) Attachment comb for hair clipper

(57) An attachment comb (10) for use with a hair clipper that includes a series of teeth (14) with lower peripheral surfaces of a particular curve that are configured for comfortable movement along the surface of a subject's head, and where the teeth are also preferably proportioned in such a manner as to permit the hair to be uniformly trimmed to relatively long lengths of an inch or greater. Specifically, in the present attachment comb (10), at least one of the teeth preferably includes a wid-

ened rib portion (40) that extends along at least a portion of the length of the lower peripheral edge of that tooth. In addition, the lower peripheral surfaces of the teeth are preferably curved into a half-teardrop shape that includes both a concave curved surface (26) and a convex curved surface (28). Finally, the teeth (14) may be flared outwardly as they extend away from the base portion (12) so that the hair being cut can be directed toward the cutting blades on the hair clipper.

FIG.1

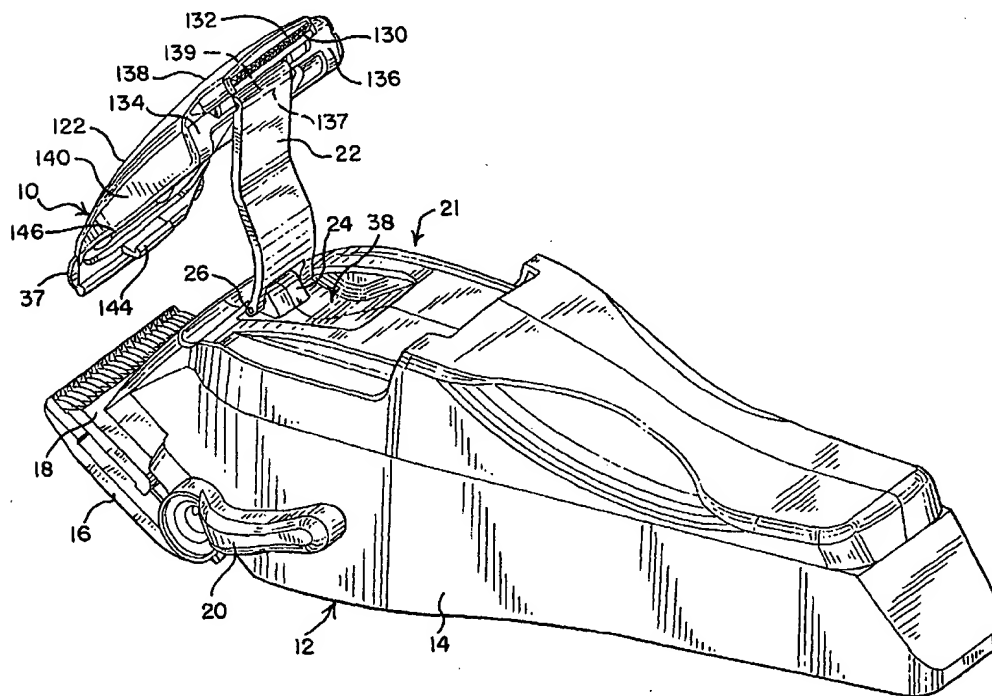




US 20030051347A1

(19) **United States**(12) **Patent Application Publication** (10) Pub. No.: **US 2003/0051347 A1**
Melton et al. (43) Pub. Date: **Mar. 20, 2003**(54) **HAIR CLIPPER WITH TETHERED
TRIMMER ATTACHMENT AND ON-BOARD
ATTACHMENT STORAGE****Publication Classification**(75) Inventors: Scott Melton, Erie, IL (US); James
McCambridge, Polo, IL (US)(51) Int. Cl.⁷ **B26B 19/10**
(52) U.S. Cl. **30/123; 30/34.1; 30/131; 30/210;**
30/216Correspondence Address:
Patrick G. Burns, Esq.
Greer, Burns & Crain, Ltd.
Suite 2500
300 S. Wacker Drive
Chicago, IL 60606 (US)(57) **ABSTRACT**

A hair clipper has a housing and a pair of blades secured outside of the housing. One of the blades is stationary, and the other reciprocates. A hair trimmer or other attachment is tethered to the hair clipper so that it can be selectively placed over the hair clipper blades in use, but is not lost when removed from the blades. The attachment is stored in a recess in the housing when not in use.

(73) Assignee: **WAHL CLIPPER CORP.**(21) Appl. No.: **09/955,802**(22) Filed: **Sep. 19, 2001**



US006604287B2

(12) **United States Patent**
Melton et al.

(10) Patent No.: **US 6,604,287 B2**
(45) Date of Patent: **Aug. 12, 2003**

(54) **HAIR CLIPPER WITH TETHERED TRIMMER ATTACHMENT AND ON-BOARD ATTACHMENT STORAGE**

(75) Inventors: **Scott Melton, Erie, IL (US); James McCambridge, Polo, IL (US)**

(73) Assignee: **Wahl Clipper Corporation, Sterling, IL (US)**

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 43 days.

(21) Appl. No.: **09/955,802**

(22) Filed: **Sep. 19, 2001**

(65) **Prior Publication Data**

US 2003/0051347 A1 Mar. 20, 2003

(51) Int. Cl.⁷ **B26B 19/10**

(52) U.S. Cl. **30/123; 30/34.1; 30/122; 30/125**

(58) Field of Search **30/122, 123, 201, 30/34.05, 34.1, 125; D28/53, 54**

(56) **References Cited**

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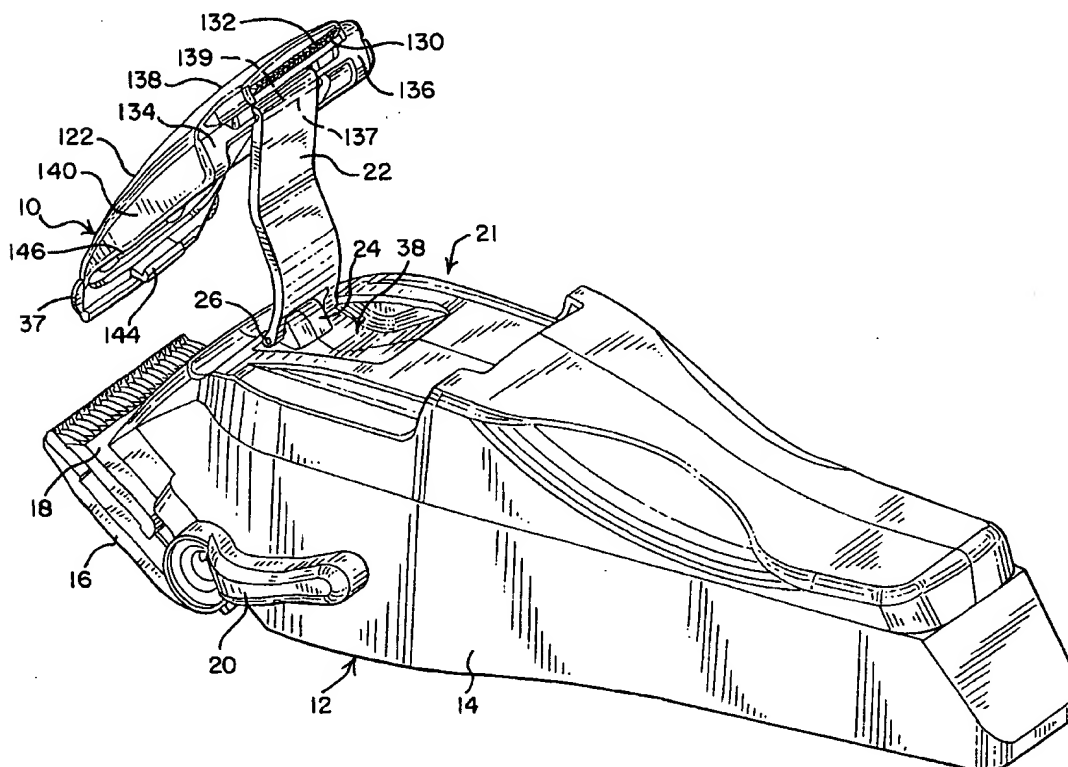
Primary Examiner—Hwei-Siu Payer

(74) *Attorney, Agent, or Firm—Greer, Burns & Crain, Ltd.*

(57) **ABSTRACT**

A hair clipper has a housing and a pair of blades secured outside of the housing. One of the blades is stationary, and the other reciprocates. A hair trimmer or other attachment is tethered to the hair clipper so that it can be selectively placed over the hair clipper blades in use, but is not lost when removed from the blades. The attachment is stored in a recess in the housing when not in use.

11 Claims, 5 Drawing Sheets



United States Patent [19]
Melton et al.

[11] Patent Number: 6,079,103
[45] Date of Patent: Jun. 27, 2000

[54] ADJUSTABLE ATTACHMENT COMB

54-140656 1/1979 Japan .

[75] Inventors: Scott Melton, Erie; Jon Thomas Feas, Rock Falls, both of Ill.

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[21] Appl. No.: 09/005,322

[22] Filed: Jan. 9, 1998

[51] Int. Cl.⁷ B26B 19/38

[52] U.S. Cl. 30/43.92; 30/537; 30/79

[58] Field of Search 30/201, 202, 133, 30/537, 79, 43.92

Primary Examiner—Rinaldi I. Rada

Assistant Examiner—Kim Ngoc Tran

Attorney, Agent, or Firm—Greer, Burns & Crain, Ltd.

[57] ABSTRACT

The present invention provides an adjustable attachment comb for use with a hair cutting device, where the adjustable attachment comb includes a stationary comb chassis that is configured and arranged to be removably attached to a hair cutting device and a movable comb body that is configured and arranged to be adjustably attached to the stationary comb chassis in one of a plurality of predetermined settings. The movable comb body and the stationary comb chassis cooperate to form a complete attachment comb unit. To supply the adjustment feature, a plurality of adjustment formations are located on the stationary comb chassis, and at least one cooperating adjustment formation is located on the movable comb body. The movable comb body can be releasably secured upon the stationary comb chassis in one of the predetermined settings by a mating interaction between one of the plurality of adjustment formations and the at least one cooperating adjustment formation. One of the predetermined settings may be selected whether the attachment comb unit is in an attached state or an unattached state with respect to a hair cutting device, and whereby the selected predetermined setting is maintained even after the state of the attachment comb unit is changed from an attached state to an unattached state and vice-versa.

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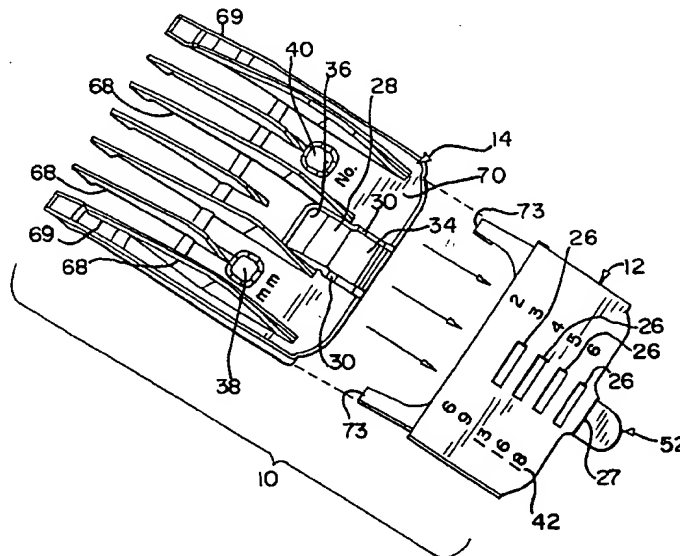
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20 Claims, 5 Drawing Sheets



United States Patent [19]
Wahl et al.

[11] **Patent Number:** **4,724,614**
[45] **Date of Patent:** **Feb. 16, 1988**

- [54] **BLADE ATTACHMENTS FOR ELECTRIC BEARD TRIMMERS**
[75] **Inventors:** John F. Wahl, Sterling; Steven Gatz, Galt, both of Ill.
[73] **Assignee:** Wahl Clipper Corporation, Sterling, Ill.
[21] **Appl. No.:** 846,615
[22] **Filed:** Apr. 1, 1986
[51] **Int. Cl.⁴** B26B 19/20; B26B 19/02
[52] **U.S. Cl.** 30/200; 30/233.5
[58] **Field of Search** 30/200, 201, 233.5
[56] **References Cited**

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4,622,745 11/1986 Wahl 30/201

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"Blade Guard", manufactured by Wahl Clipper Corporation, Sterling, Ill. 61081.

Primary Examiner—E. R. Kazenske

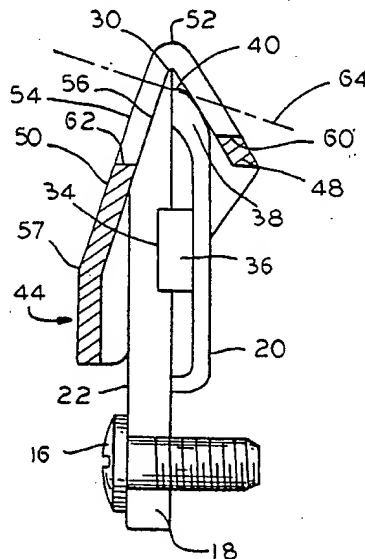
Assistant Examiner—Michael D. Folkerts

Attorney, Agent, or Firm—Welsh & Katz, Ltd.

[57] **ABSTRACT**

An attachment is provided for electric beard trimmers which spaces the teeth on the blades of the trimmer a desired distance from the skin to produce stubble having the appearance of uniform growth. The attachment may be selectively secured to and removed from the trimmer. The attachment covers the cutting teeth on the blades and includes a plurality of openings which expose selected teeth on the trimmer blades. The length of the trimmed stubble may be between about 0.010 inches and 0.090 inches or more, and is determined by the configuration of the blades of the trimmer and the thickness of the attachment.

2 Claims, 7 Drawing Figures



United States Patent [19] Wahl

[11] Patent Number: 4,622,745
[45] Date of Patent: Nov. 18, 1986

- [54] HAIR TRIMMING APPARATUS
[75] Inventor: Gregory S. Wahl, Sterling, Ill.
[73] Assignee: Wahl Clipper Corporation, Sterling, Ill.
[21] Appl. No.: 655,907
[22] Filed: Sep. 28, 1984
[51] Int. Cl.⁴ B26B 19/20
[52] U.S. Cl. 30/201
[58] Field of Search 30/201, 200, 202, 30

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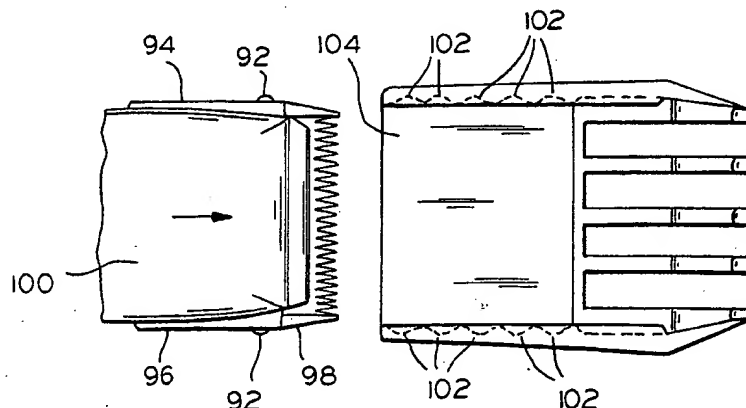
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Primary Examiner—Jimmy C. Peters
Attorney, Agent, or Firm—Welsh & Katz, Ltd.

[57] ABSTRACT

The hair trimming apparatus disclosed herein is particularly adapted for trimming beards, mustaches and the like. It includes a hair clipper and a one-piece adjustable comb attachment. The comb attachment is slidably secured to the hair clipper by rails or the like which surround part of the clipper, such as the side edges of a stationary blade. The position of the comb attachment with respect to the blades is determined by placing any one of a plurality of indentations in the attachment over a protruding part of the clipper, such as one or more screw heads which secure one or more of the blades to the clipper. The position may be easily changed by merely moving the attachment to a different indentation. In this manner, the comb attachment may be easily secured to the clipper in any one of a number of positions, without manipulating other parts of the apparatus. In addition, fins on the comb attachment are recessed behind the clipper blades so that the clipper may more easily reach and trim mustache hair by cutting it in the direction of hair growth.

7 Claims, 12 Drawing Figures



[54] **HAIR TRIMMER ATTACHMENT**

[76] Inventor: **Frank R. Pepera**, 4211 Milford Ave., Parma, Ohio 44134

[22] Filed: **Oct. 1, 1973**

[21] Appl. No.: **402,405**

[52] U.S. Cl. **30/200**

[51] Int. Cl.² **B26B 19/38**

[58] Field of Search **30/200, 20**

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Primary Examiner—**Al Lawrence Smith**

Assistant Examiner—**J. C. Peters**

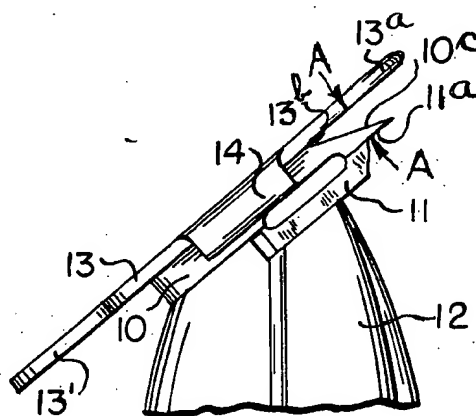
Attorney, Agent, or Firm—**Baldwin, Egan, Walling & Fetzer**

[57] **ABSTRACT**

For use with a hair trimmer of known design having

coacting relatively oscillatable shear plates each provided with a series of generally V-shape cutting teeth and wherein a fixed shear plate is in position to engage the head of the party whose hair is being trimmed and an oscillatable shear plate is in contact therewith, a combination is provided of a removable comb plate clipped onto the bottom of the stationary shear plate and having a series of parallel comb teeth extending forwardly of the cutting teeth and spaced a predetermined distance from the shearing level whereby a person may cut his own hair using the trimmer with the comb attachment so as to cut the individual hairs at uniform length. The invention includes a plurality of such detachable comb plates so that one might trim his hair say one-quarter of an inch long at a certain distance above his neckline, and then change to another comb plate attachment which would permit him to cut the hair for one-eighth of an inch length extending downwardly from the first cut and so on, to the neckline or other stopping point. A comb plate might be provided to cut to a length of 1/16th or 1/32nd of an inch.

2 Claims, 7 Drawing Figures



United States Patent
Cercone

[15] 3,648,370

[45] Mar. 14, 1972

[54] **SHOE COMB AND ATTACHMENT**

[72] Inventor: Daniel Cercone, 212 Cedarville Street,
Pittsburgh, Pa. 15224

[22] Filed: Apr. 3, 1970

[21] Appl. No.: 25,377

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Primary Examiner—Theron E. Condon

Assistant Examiner—J. C. Peters

Attorney—T. H. Murray

[52] U.S. Cl. 30/201

[51] Int. Cl. B26b 19/20

[58] Field of Search 30/200, 201, 202

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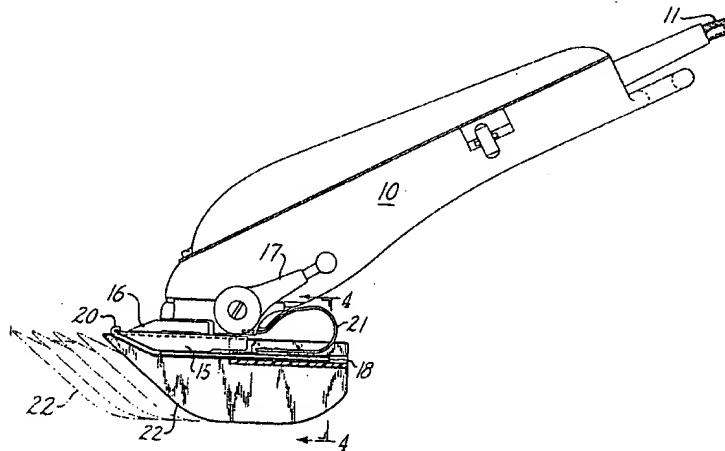
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[57] **ABSTRACT**

This invention relates generally to an improved, tapering shoe comb adapted for use in detachable connection with a hair clipper and more particularly to a shoe comb which is attached to the hair clipper by means of a semipermanent base piece which is attached directly to the bottom of the clipper so that it may be practically employed with clippers which do not have sufficient extra width of the stationary comb plate for other means of attachment.

3 Claims, 6 Drawing Figures



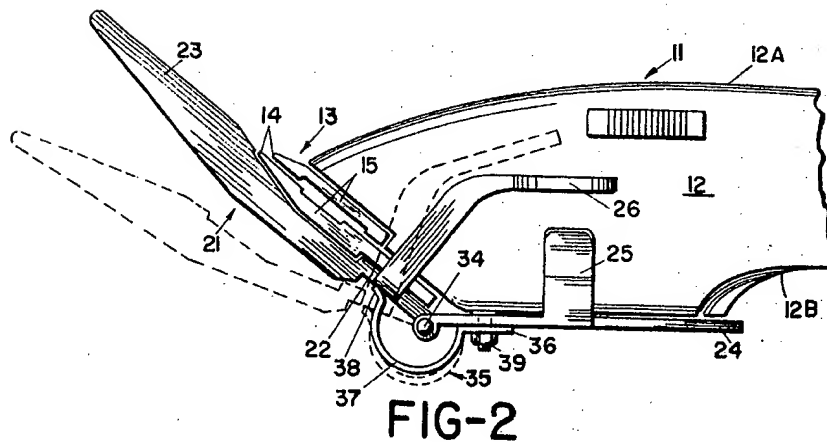
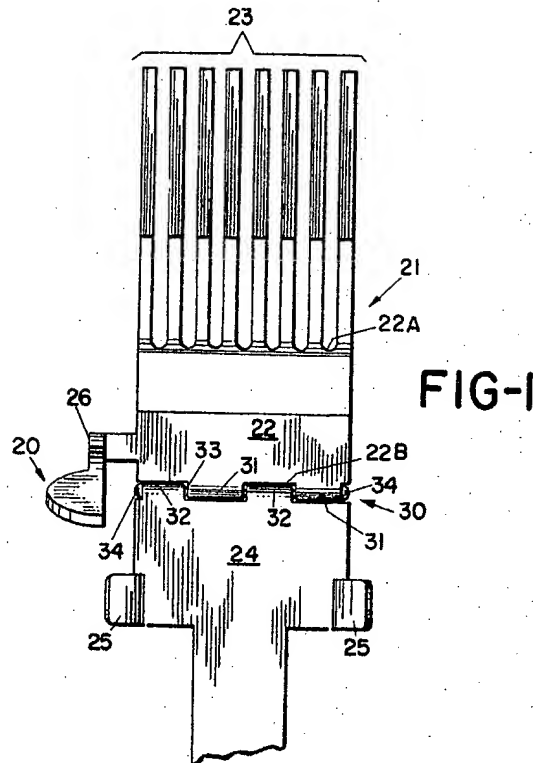
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V. W. PUCINO

3,320,668

HAIR CLIPPER HAVING MECHANICAL CREWCUT MEANS

Filed March 12, 1965



INVENTOR.
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MORGAN, FINNEGAN, DURHAM & PINE
ATTORNEYS

Nov. 29, 1966

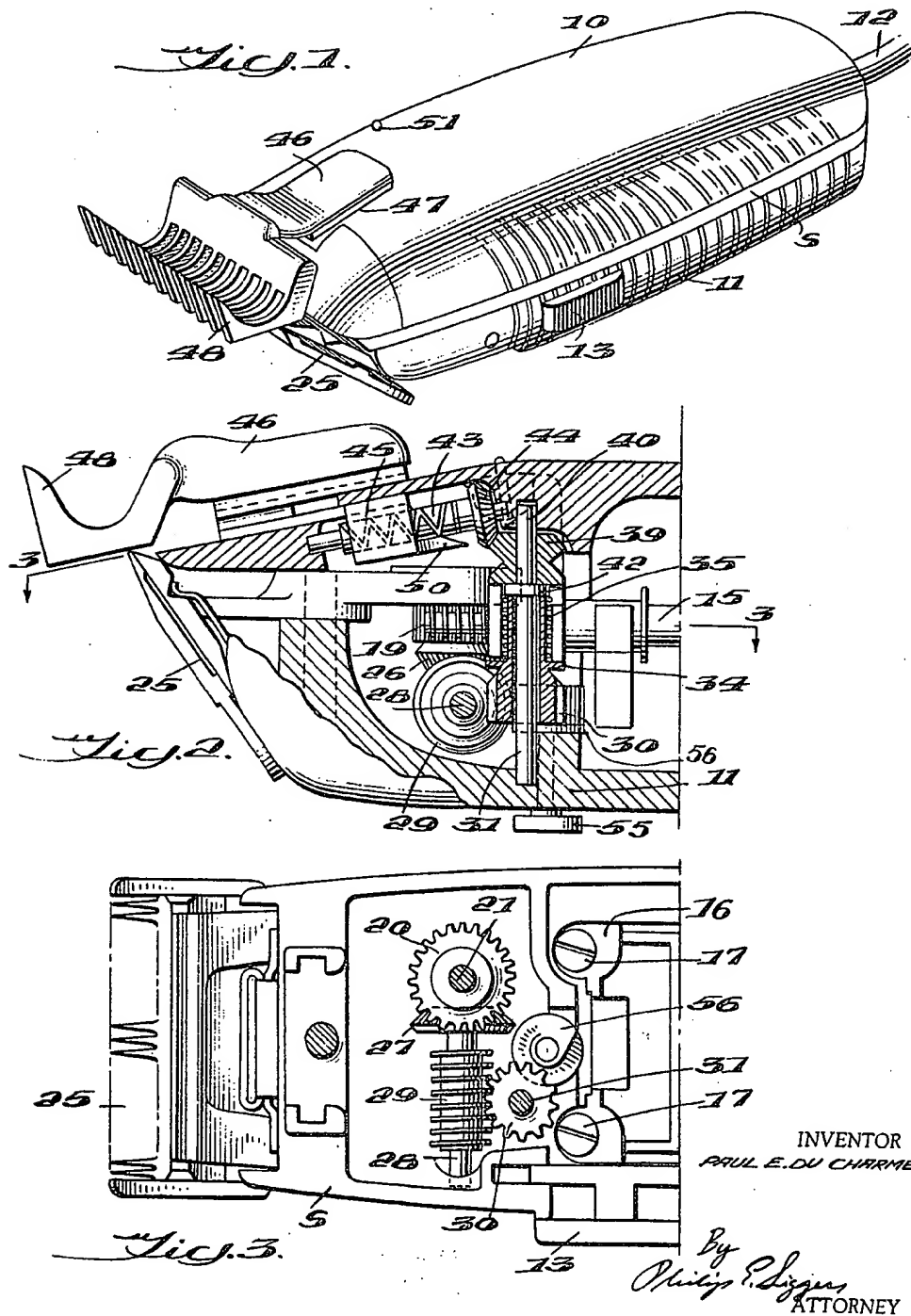
P. E. DU CHARME

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HAIR CLIPPER WITH CUT REGULATOR INDICATOR

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4 Sheets-Sheet 1



Sept. 22, 1964

B. K. MILBOURNE

3,149,418

ATTACHMENT FOR HAIR CLIPPERS

Filed Aug. 13, 1962

2 Sheets-Sheet 1

FIG-1

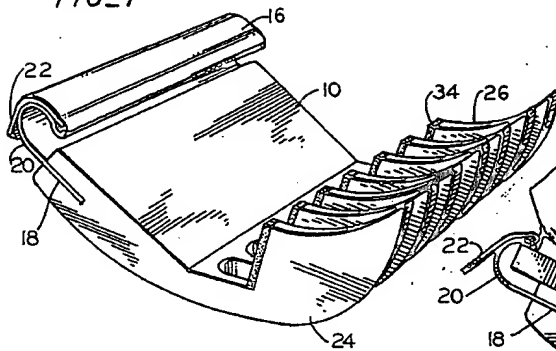


FIG-2

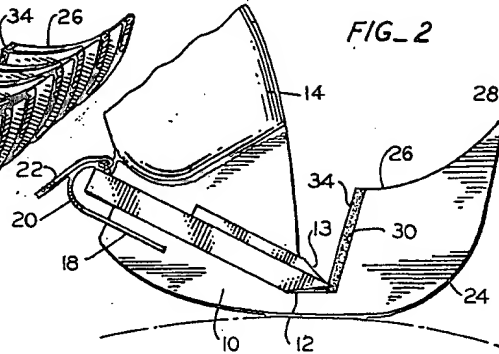


FIG-4

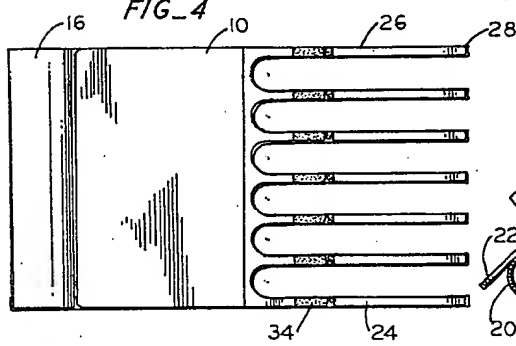


FIG-3

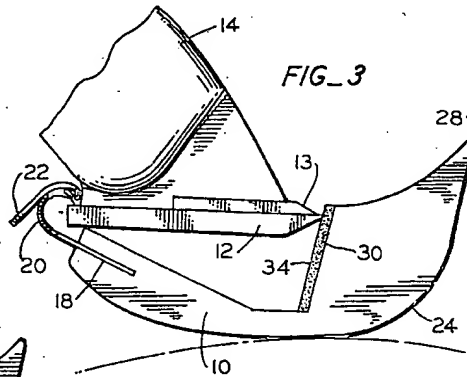


FIG-6

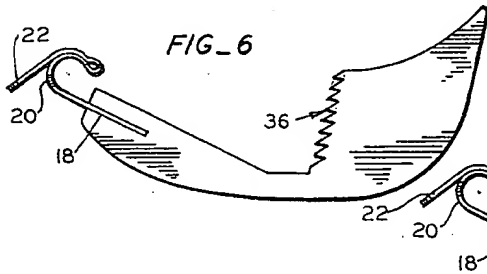


FIG-5

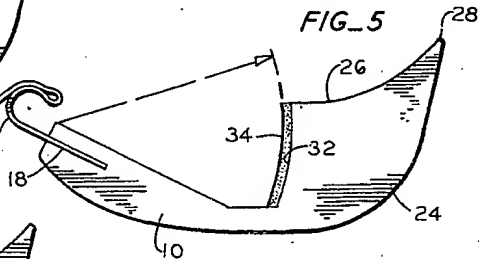
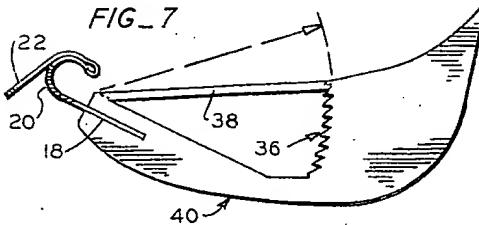


FIG-7



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ATTORNEYS

Oct. 30, 1962

E. W. CLARK

3,060,573

THINNING ATTACHMENT FOR HAIR CLIPPERS

Filed Feb. 14, 1961

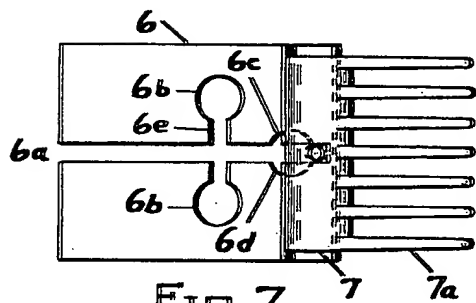


Fig. 7.

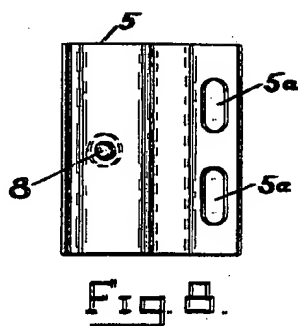


Fig. 8.

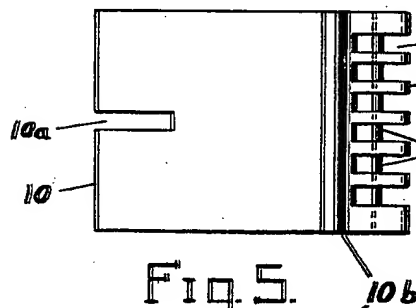


Fig. 5.

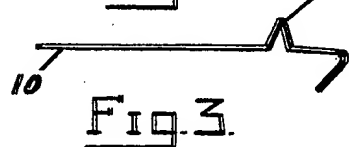


Fig. 3.

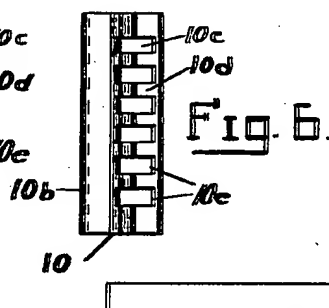


Fig. 6.

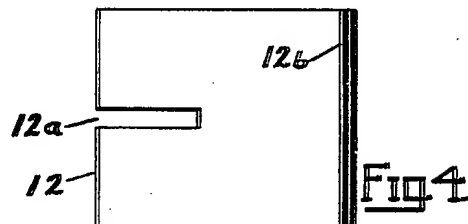


Fig. 4.

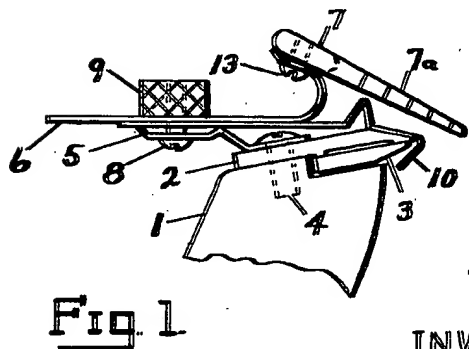


Fig. 1.

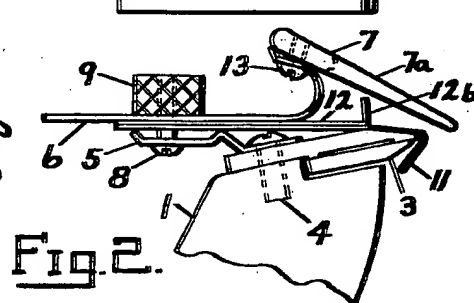


Fig. 2.

INVENTOR

Earl W. Clark.

March 14, 1961

E. W. CLARK

2,974,412

ATTACHMENT FOR HAIR CLIPPERS

Filed Aug. 21, 1959

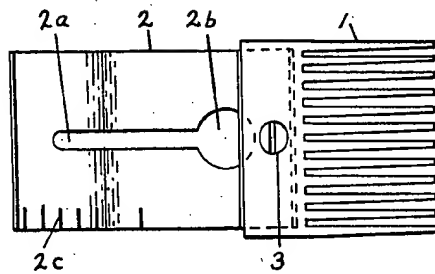


Fig. 1.

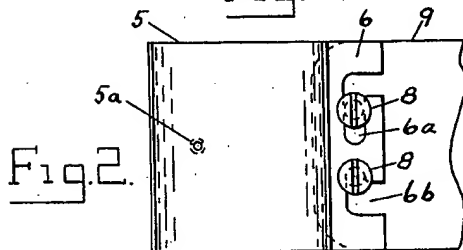


Fig. 2.

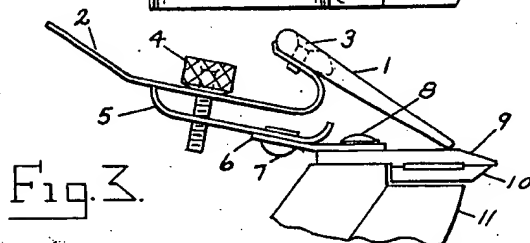


Fig. 3.

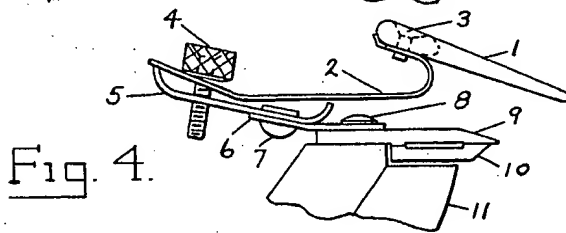


Fig. 4.

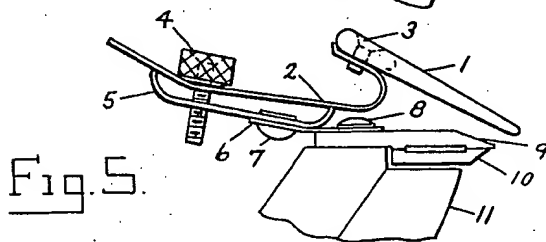


Fig. 5.

INVENTOR.
Earl W. Clark.

Dec. 15, 1959

E. W. CLARK

2,916,820

ATTACHMENT FOR HAIR CLIPPERS

Filed March 20, 1958

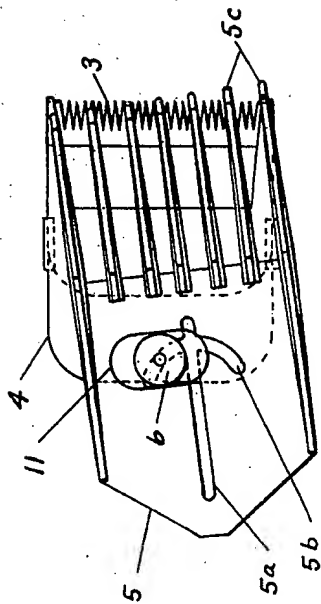


Fig. 4.

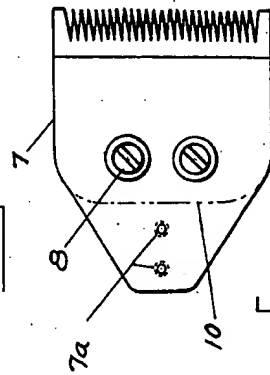


Fig. 5.

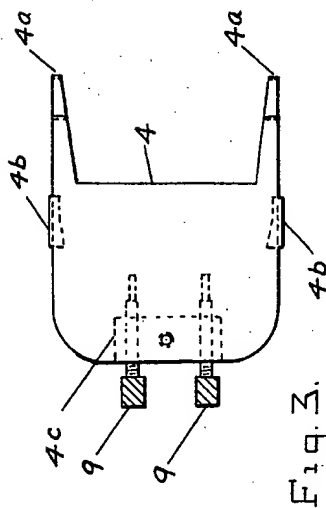


Fig. 3.

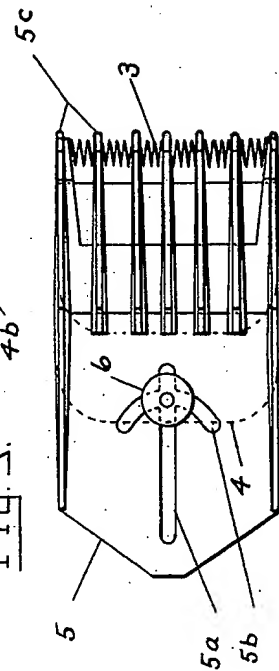


Fig. 2.

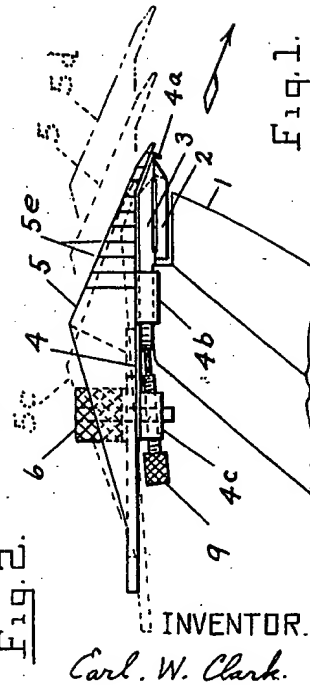


Fig. 1.

INVENTOR.

Carl. W. Clark.